

EZxx1 SERIES

The difference from the
previous ***EZxx0 SERIES***

<<TECHNICAL MANUAL>>

REVISION 1.0

JULY 2012

Copyright: 2012 Riso Kagaku Corporation
All Rights Reserved. This Technical Manual is prepared and written exclusively for use by the RISO International Group of Companies, Certified Distributors and Dealers.
Reproduction and/or transmittal of this material in any form or by any means, including photocopying or recording of the information is strictly prohibited without the consent of Riso Kagaku Corporation Overseas Technical Department.

RISO Digital Duplicator

EZ2 Series

EZ3 Series

EZ5 Series

The contents of the following CHAPTERS typed in BLUE color are revised from the previous EZ/EV Technical Manual (Rev. 1.1-R)

CHAPTER 1 : MAINTENANCE

CHAPTER 2 : MACHINE SUMMARY

CHAPTER 3 : MAIN DRIVE

CHAPTER 4 : FIRST PAPER FEED

CHAPTER 5 : - - - - -

CHAPTER 6 : SECOND PAPER FEED

CHAPTER 7 : PRESS SECTION

CHAPTER 8 : PAPER EJECTION

CHAPTER 9 : PRINT DRUM

CHAPTER 10 : CLAMP UNIT

CHAPTER 11 : MASTER REMOVAL

CHAPTER 12 : FB ORIGINAL SCANNING

CHAPTER 13 : AF SCANNING

CHAPTER 14 : - - - - -

CHAPTER 15 : - - - - -

CHAPTER 16 : MASTER MAKING

CHAPTER 17 : PANEL MESSAGE

CHAPTER 18 : TEST MODE

CHAPTER 19 : OTHER PRECAUTIONS

CHAPTER 20 : WIRING DIAGRAM

CHAPTER 21 : ELECTRICAL COMPONENTS

This technical manual includes information on three (3) EZ machine series.

Some of the contents in the book apply only to certain machine models.

O, X or # marks are given under each machine model name in a box to identify which machine models the explanation in this book applies to.

The (O) mark indicates that the explanation given in the book applies to that machine model.

The (X) mark indicates that the explanation given in the book does not apply to that machine model.

The (#) mark indicates that the explanation given within the book applies to that machine model with certain conditions.

Example 1 :

EZ2	EZ3	EZ5
O	O	O

When (O) mark is given under all the machine models, it means that the explanation given in the book applies to all the machine models indicated.

Example 2 :

EZ2	EZ3	EZ5
X	O	O

When (X) mark is given under certain machine models, it means that the explanation given in the book does not apply to those machine models with the (X) mark.

Example 3 :

EZ2	EZ3	EZ5
#	O	O

No Paper feed pressure sensor on EZ2.

When (#) mark is given under certain machine models, it means that the explanation given in the book apply to those machine models with the (#) mark with certain condition. In such cases, comments are given under the box.

CAUTION**[Handling of Lithium Battery]**

Never fail to follow the following instructions when you discard the used lithium battery.

1. Never let the battery short-circuited.

If the (+) and (-) terminals contact each other or metal materials, the battery will be short-circuited. If the batteries are collected and stored in disorderly or one upon another, the above-mentioned case will occur.

- DANGER -

If the battery is short-circuited, it will heat up and may in some cases explode into fire.

2. Never heat up the battery.

- DANGER -

If you heat the battery up to more than 100 degrees Celsius or put it into the fire, it may burn dangerously or explode.

3. Never disassemble the battery or press it into deformation.

- DANGER -

If you disassemble the battery, the gas pouring out of the inside may hurt your throat or the negative lithium may heat up into fire.

If the battery is pressed into deformation, the liquid inside may leak out of the sealed part or the battery may be short-circuited inside and explode.

4. Never fail to keep the battery out of reach of children.

If you put the battery within reach of children, they may swallow it down. Should they swallow the battery, immediately consult the doctor.

[Replacement of the Lithium Battery]

1. The lithium battery must be replaced by a trained and authorized service technician.
2. The battery must be replaced only with the same or equivalent type recommended by the manufacturer.
3. Discard used batteries according to the manufacturer instructions.

Perchlorate Material-special handling may apply,

See www.dtsc.ca.gov/hazardouswaste/perchlorate

This product may contain certain substances which are restricted when disposed.

Therefore, be sure to consult your contracted service dealer.

Warning

!! WARNING !!

Important Safety Precautions

1. Always disconnect electrical supply before placing hands in the machine.

I. To avoid injuries:

Be sure to disconnect the electrical power before disassembling, assembling, or when making adjustments on the machine.

II. Protection of the machine:

Make sure to turn OFF the power to the machine before plugging or unplugging the electrical connectors, or when connecting a Meter.

2. Always connect electrical connectors firmly.

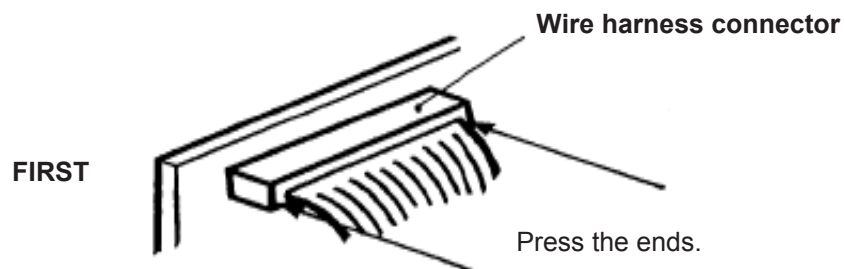
I. To avoid electrical failure:

The connectors must be connected firmly together and onto the PCBs.

Press on the ends of the connectors and then on the middle to ensure a firm fit.

II. Protection of the electrical components:

The electrical components may be damaged due to short circuits caused by a loose connector.



0101

1. Work Precautions

When conducting maintenance work, be careful to avoid injury caused by springs or the sharp edges of sheet metal.

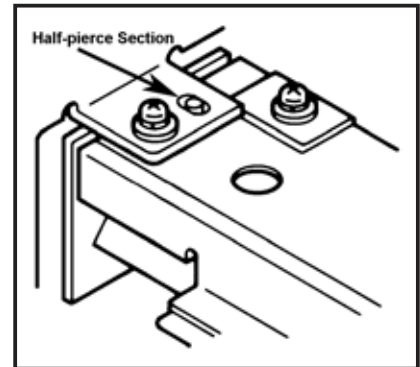
Inspection

If you discover any defects or problems during an inspection, fix the problems or if necessary take steps such as replacing a part.

Removal

Check the problem area. At the same time, examine the cause of the problem and determine whether the part needs to be removed or disassembled. Next proceed according to the procedures presented in the Technical Manual. In cases where, for example, it is necessary to disassemble areas with large numbers of parts, parts which are similar to each other, or parts which are the same on the left and right, sort the parts so that you do not mix them up during reassembly.

- (1) Carefully sort the removed parts.
- (2) Distinguish between parts which are being replaced and those which will be reused.
- (3) When replacing screws, etc., be sure to use the specified sizes.



Assembly and Installation

Unless specified otherwise, perform the removal procedures in reverse during assembly and installation. In cases where protrusions or holes are provided to assist in positioning parts, use them for accurate positioning and securing.

0102

(Protrusions and holes for positioning parts → Half pierced section)

Tools

Using tools other than those specified can lead to injury or damage screws and parts. Have all the tools necessary for the work available.

[Standard Tool List]

Type	Tip size	Shaft length, etc.
Phillips screwdriver	No. 2	(250 mm)
	No. 2	(100 mm–150 mm)
	No. 2	(stubby type)
	No. 1	(75 mm–100 mm)
Standard screwdriver	6 mm	(100 mm–150 mm)
	3 mm	(100 mm–150 mm)
	1.8 mm	(precision type)
Nut driver (box driver)	8 mm	(100 mm–150 mm)
	7 mm	(100 mm–150 mm)
High frequency driver	2.5 mm	
Spanners	5 mm	5.5 mm 7 mm
	8 mm	10 mm 13 mm
		Monkey
Hex wrenches	5.0 mm	4.0 mm 3.0 mm
	2.5 mm	2.0 mm 1.5 mm
	(For 3.0mm, 2 pieces required)	

0103

Type	Remarks
Steel scale	150 mm
Feeler gauge	
Radial cutting pliers	
Pliers	
Nipper	
Small flashlight	
Multimeter	
Soldering iron	20 W–30 W
File	Flat, round

0104

3. Installation location

Do not install the machine in any of the following locations.

- (1) Those subject to direct sunlight or any bright location such as by a window (If you must install in such a location, put a curtain or the like over the window.).
- (2) Those where the temperature changes drastically.
- (3) Those that are too hot, cold, humid, or dry.

RECOMMENDED:

Temperature range: 15 degrees Celsius - 30 degrees Celsius

Humidity range: 40% - 70% No condensation allowed

- (4) Those with radiant heat sources and any locations in the direct path of air from air conditioners or heaters.
- (5) Any poorly ventilated location.
- (6) Dusty atmosphere.
- (7) Any tilted location.

(Installation height difference: 10 mm max. front to rear, 10 mm max. left to right).

Electrical connection

- > Plug the plug securely into the socket so that there is no problem with the contact in the power supply plug section.
- > Do not use any triplets or extension cords.
- > Do not allow any other machine to stand on or crush the power cord.

Ground connection

- > Always ground this machine to prevent electrical shock in case of an electrical leakage.

4. Recommended consumption period of RISO consumable

RISO consumable for this equipment should be consumed within 18 months from the manufacturing month. For the best performance, it is recommended that the RISO consumable be used quickly after the purchase. The manufacturing month (Year & Month) is printed on the Ink Cartridge surface and on the inner surface of the Master Roll core.

CHAPTER 2: MACHINE SUMMARY

Contents

1. Machine Specification	2
1) Optional Accessories for EZ201, EZ221, EZ231, EZ301, EZ331, EZ371 & EZ391.....	2
2) Feature List for EZ201, EZ221, EZ231, EZ301, EZ331, EZ371 & EZ391.....	3
3) Specification: EZ201	4
4) Specification: EZ221	5
5) Specification: EZ231	6
6) Specification: EZ301	7
7) Specification: EZ331	8
8) Specification: EZ371	9
9) Specification: EZ391	10
10) Optional Accessories for EZ531, EZ571 & EZ591.....	11
11) Specification: EZ531	12
12) Specification: EZ571	13
13) Specification: EZ591	14

1. Machine Specification

1) Optional Accessories for EZ201, EZ221, EZ231, EZ301, EZ331, EZ371 & EZ391.

Optional Accessories

A variety of optional accessories are available to enhance the capabilities of the machine. For details about the optional accessories, see their respective user's manuals.

- **Color Drum (Cylinder)**

A variety of colors (colours) are available, such as blue, red, green, and brown. Store a drum (cylinder) in its own case.

- **Auto Document Feeder AF-VI**

Feeds up to 50 sheets of originals automatically.

- **Job Separator IV**

With the Programmed Printing function, allows the machine to print and sort into groups separated by tape.

- **Key Card Counter IV**

With a single button press, shows the numbers of printed copies and consumed masters within a given period of time. This can help you manage costs.

- **Card Feed Kit**

Use for thick paper such as cards. Replace with this unit when thick paper needs to pass through the machine.

- **Envelope Feed Kit**

Use for envelopes.

- **Ink/Master Holder**

A rack kit for storing supply such as ink and masters.

- **Stand**

- **RISO PC Interface Card USB2.0**

Use to connect a computer to the machine using a USB cable.

- **RISO Network Card**

Use to directly connect the machine to the network.

This comes with the RISO-MONITOR software that allows you to check the status of the machine from computers.

- **Wide Stacking Tray**

This unit can take paper up to 340 mm × 555 mm ($13\frac{6}{16}$ " × $21\frac{14}{16}$ ") in size.

2) Feature List for EZ201, EZ221, EZ231, EZ301, EZ331, EZ371 & EZ391.

Feature List

Feature	EZ391/EZ371/EZ331/ EZ301	EZ231/EZ221/EZ201
Standard Reproduction Ratio	○	○
Zoom	○	NA
Dot process	○	NA
Scanning level (five manually variable steps)	○	○
Scanning level (auto)	○	○
Book shadow edit	○	○
Programed Printing	○	○
2-Up printing	○	○
Ink Saving	○	○
Pencil	○	○
Custom Setting mode	○	○
Confidential mode	○	○
Auto idling	○	○
Idling (manual)	○	○
Energy Saving mode	○	○
Auto-Process	○	○
Print speed	○	○
Print density	○	NA
Paper Jumping Wing Adjustment	○	NA
Paper Arranger	○	NA
Corrugator	NA	○
Direct Print	Optional	Optional

3) Specification: EZ201**RISO EZ201**

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the ADF unit (option) : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22lb) or less When using the ADF unit (option) : 50g/m ² (13-lb bond) - 128g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 157g/m ² (87-lb index)
Image Processing Mode	Line, Photo, Duo, Pencil
Master-making Time	Approx. 25 seconds (for A4/portrait/100% reproduction ratio)
Printing Area (max.)	210 mm × 290 mm ($8\frac{9}{32}$ " × $11\frac{13}{32}$ ")
Print Reproduction Ratio	Standard reproduction ratio (enlargement) : 141%, 122%, 116% Standard reproduction ratio (reduction) : 94%, 87%, 82%, 71%
Print Speed	Approx. 60 - 130 sheets per minute (five steps variable)
Print Position Adjustment	Vertical : ±15 mm ($\pm\frac{1}{2}$ ") Horizontal : ±10 mm ($\pm\frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 295 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LED panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Job Separator IV, Key Card Counter IV, Color Drum (Cylinder), Card Feed Kit, Envelop Feed Kit, Ink/Master Holder, Stand, RISO Network Card, RISO PC Interface Card USB2.0, Wide Stacking Tray
Power Source	EZ201E : 220-240V~, 1.3A, 50-60Hz EZ201A : 220-240V~, 1.3A, 50-60Hz
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 100 kg (220lb)
Safety Standard	IEC 60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

4) Specification: EZ221

RISO EZ221

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1^{31}/_{32}$ " × $3^{9}/_{16}$ ") - 310 mm × 432 mm ($12^{3}/_{16}$ " × 17") When using the ADF unit (option) : 100 mm × 148 mm ($3^{15}/_{16}$ " × $5^{27}/_{32}$ ") - 310 mm × 432 mm ($12^{3}/_{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22lb) or less When using the ADF unit (option) : 50g/m ² (13-lb bond) - 128g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3^{15}/_{16}$ " × $5^{27}/_{32}$ ") - 310 mm × 432 mm ($12^{3}/_{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 157g/m ² (87-lb index)
Image Processing Mode	Line, Photo, Duo, Pencil
Master-making Time	Approx. 25 seconds (for A4/portrait/100% reproduction ratio)
Printing Area (max.)	210 mm × 357 mm ($8^{1}/_{4}$ " × $14^{1}/_{16}$ ")
Print Reproduction Ratio	Standard reproduction ratio (enlargement) EZ221U : 154%, 129% EZ221A : 141%, 122%, 116% Standard reproduction ratio (reduction) EZ221U : 94%, 78%, 65% EZ221A : 94%, 87%, 82%, 71%
Print Speed	Approx. 60 - 130 sheets per minute (five steps variable)
Print Position Adjustment	Vertical : ±15 mm ($\pm 1/2$ ") Horizontal : ±10 mm ($\pm 3/8$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 250 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LED panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Job Separator IV, Key Card Counter IV, Color Drum (Cylinder), Card Feed Kit, Envelop Feed Kit, Ink/Master Holder, Stand, RISO Network Card, RISO PC Interface Card USB2.0, Wide Stacking Tray
Power Source	EZ221U:100-120/220-240V~, 2.5/1.3A, 50-60Hz EZ221A:220-240V~, 1.3A, 50-60Hz
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55^{23}/_{32}$ "(W) × $25^{25}/_{32}$ "(D) × $26^{3}/_{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30^{23}/_{32}$ "(W) × $25^{25}/_{32}$ "(D) × $26^{3}/_{16}$ "(H))
Weight	Approx. 100 kg (220lb)
Safety Standard	IEC 60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

5) Specification: EZ231

RISO EZ231

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the ADF unit (option) : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22lb) or less When using the ADF unit (option) : 50g/m ² (13-lb bond) - 128g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 157g/m ² (87-lb index)
Image Processing Mode	Line, Photo, Duo, Pencil
Master-making Time	Approx. 25 seconds (for A4/portrait/100% reproduction ratio)
Printing Area (max.)	251 mm × 357 mm ($9\frac{7}{8}$ " × $14\frac{1}{16}$ ")
Print Reproduction Ratio	Standard reproduction ratio (enlargement) : 141%, 122%, 116% Standard reproduction ratio (reduction) : 94%, 87%, 82%, 71%
Print Speed	Approx. 60 - 130 sheets per minute (five steps variable)
Print Position Adjustment	Vertical : ±15 mm ($\pm\frac{1}{2}$ ") Horizontal : ±10 mm ($\pm\frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 250 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LED panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Job Separator IV, Key Card Counter IV, Color Drum (Cylinder), Card Feed Kit, Envelop Feed Kit, Ink/Master Holder, Stand, RISO Network Card, RISO PC Interface Card USB2.0, Wide Stacking Tray
Power Source	EZ231E:220-240V~, 1.3A, 50-60Hz EZ231U:220-240V~, 1.3A, 50-60Hz EZ231A (For Korea):220V~, 1.3A, 60Hz EZ231A (For Taiwan):110V~, 2.5A, 60Hz EZ231A (For other countries):220-240V~, 1.3A, 50-60Hz
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 100 kg (220lb)
Safety Standard	IEC 60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

6) Specification: EZ301

RISO EZ301

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the ADF unit (option) : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22lb) or less When using the ADF unit (option) : 50g/m ² (13-lb bond) - 128g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 210g/m ² (110-lb index)
Image Processing Mode	Line, Photo, Duo, Pencil
Master-making Time	Approx. 22 seconds (for A4/portrait/100% reproduction ratio)
Printing Area (max.)	210 mm × 290 mm ($8\frac{1}{4}$ " × $11\frac{7}{16}$ ")
Print Reproduction Ratio	Standard reproduction ratio (enlargement) : 141%, 122%, 116% Standard reproduction ratio (reduction) : 94%, 87%, 82%, 71%
Print Speed	Approx. 60 - 130 sheets per minute (five steps variable)
Print Position Adjustment	Vertical : ±15 mm ($\pm\frac{1}{2}$ ") Horizontal : ±10 mm ($\pm\frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 295 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LED panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Job Separator IV, Key Card Counter IV, Color Drum (Cylinder), Card Feed Kit, Envelop Feed Kit, Ink/Master Holder, Stand, RISO Network Card, RISO PC Interface Card USB2.0, Wide Stacking Tray
Power Source	EZ301E:220-240V~, 1.3A, 50-60Hz
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 101 kg (222lb)
Safety Standard	IEC 60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

7) Specification: EZ331

RISO EZ331

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the ADF unit (option) : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22lb) or less When using the ADF unit (option) : 50g/m ² (13-lb bond) - 128g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 210g/m ² (110-lb index)
Image Processing Mode	Line, Photo, Duo, Pencil
Master-making Time	Approx. 20 seconds (for A4/portrait/100% reproduction ratio)
Printing Area (max.)	251 mm × 357 mm ($9\frac{7}{8}$ " × $14\frac{1}{16}$ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 141%, 122%, 116% Standard reproduction ratio (reduction) : 94%, 87%, 82%, 71%
Print Speed	Approx. 60 - 130 sheets per minute (five steps variable)
Print Position Adjustment	Vertical : ±15 mm ($\pm\frac{1}{2}$ ") Horizontal : ±10 mm ($\pm\frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 250 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LED panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Job Separator IV, Key Card Counter IV, Color Drum (Cylinder), Card Feed Kit, Envelop Feed Kit, Ink/Master Holder, Stand, RISO Network Card, RISO PC Interface Card USB2.0, Wide Stacking Tray
Power Source	EZ331A (For Korea):220V~, 1.3A, 60Hz EZ331A (For other countries):220-240V~, 1.3A, 50-60Hz
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 101 kg (222lb)
Safety Standard	IEC 60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

8) Specification: EZ371

RISO EZ371

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the ADF unit (option) : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22lb) or less When using the ADF unit (option) : 50g/m ² (13-lb bond) - 128g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 210g/m ² (110-lb index)
Image Processing Mode	Line, Photo, Duo, Pencil
Master-making Time	Approx. 20 seconds (for A4/landscape/100% reproduction ratio)
Printing Area (max.)	291 mm × 413 mm ($11\frac{7}{16}$ " × $16\frac{1}{4}$ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 141%, 122%, 116% Standard reproduction ratio (reduction) : 94%, 87%, 82%, 71%
Print Speed	Approx. 60 - 130 sheets per minute (five steps variable)
Print Position Adjustment	Vertical : ± 15 mm ($\pm 1\frac{1}{2}$ ") Horizontal : ± 10 mm ($\pm \frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 220 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LED panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Job Separator IV, Key Card Counter IV, Color Drum (Cylinder), Card Feed Kit, Envelop Feed Kit, Ink/Master Holder, Stand, RISO Network Card, RISO PC Interface Card USB2.0, Wide Stacking Tray
Power Source	EZ371E:220-240V~, 1.3A, 50-60Hz EZ371A (For Korea):220V~, 1.3A, 60Hz EZ371A (For Taiwan):110V~, 2.5A, 60Hz EZ371A (For other countries):220-240V~, 1.3A, 50-60Hz
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 101 kg (222lb)
Safety Standard	IEC 60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

9) Specification: EZ391

RISO EZ391

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the ADF unit (option) : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22lb) or less When using the ADF unit (option) : 50g/m ² (13-lb bond) - 128g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 210g/m ² (110-lb index)
Image Processing Mode	Line, Photo, Duo, Pencil
Master-making Time	Approx. 20 seconds (for A4/landscape/100% reproduction ratio)
Printing Area (max.)	291 mm × 425 mm ($11\frac{7}{16}$ " × $16\frac{3}{4}$ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 154%, 129%, 121% Standard reproduction ratio (reduction) : 94%, 78%, 65%, 61%
Print Speed	Approx. 60 - 130 sheets per minute (five steps variable)
Print Position Adjustment	Vertical : ±15 mm ($\pm\frac{1}{2}$ ") Horizontal : ±10 mm ($\pm\frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 215 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LED panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Job Separator IV, Key Card Counter IV, Color Drum (Cylinder), Card Feed Kit, Envelop Feed Kit, Ink/Master Holder, Stand, RISO Network Card, RISO PC Interface Card USB2.0, Wide Stacking Tray
Power Source	EZ391U:100-120/220-240V~, 2.5/1.3A, 50-60Hz
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 101 kg (222lb)
Safety Standard	IEC 60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

10) Optional Accessories for EZ531, EZ571 & EZ591

Optional Accessories

A variety of optional accessories are available to enhance the capabilities of the machine.
For details about the optional accessories, see your dealer (or authorized service representative).

◆ Auto Document Feeder AF-VI

Feed up to 50 sheets of originals automatically.

◆ Color Drum (Cylinder)

Simply change the Drum (Cylinder) to print in multiple colors (colours). (Case included)

◆ A4 (Letter) Drum (Cylinder) W

A special drum (cylinder) for A4 or Letter size landscape paper. (Case included)

◆ Wide Stacking Tray

This unit can take paper up to 340 mm × 555 mm ($13\frac{3}{8}$ " × $21\frac{27}{32}$ ") in size.

◆ Key Card Counter

With a single button press, shows the numbers of printed copies and consumed masters within a given period of time. This can help you manage costs.

◆ Job Separator

With the Programed Printing function, allows the machine to print and sort into groups separated by tape.

◆ Document Storage Card DM-128CF / Document Storage Card DM-512CF

A Storage Card for using the Storage Memory function.

◆ Card Feed kit

This unit allows you to feed thicker paper such as cards.

◆ Envelope Feed Kit

This unit allows you to feed envelopes.

◆ Stand**◆ Ink/Master Holder**

A rack kit for storing supply such as ink and masters.

◆ RISO Network Card

Use to directly connect the machine to the network.

This comes with the RISO-MONITOR software that allows you to check the status of the machine from computers.

◆ RISO Controller IS300

A custom controller enabling the machine to be used as a network-connected PostScript 3 printer.

11) Specification: EZ531**RISO EZ531**

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22 lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the Auto Document Feeder AF-VI : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22 lb) or less When using the Auto Document Feeder AF-VI : 50 g/m ² (13-lb bond) - 128 g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64 g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 210g/m ² (110-lb index)
Image Processing mode	Line, Photo (Standard/Portrait/Group), Duo (Line/Photo/Shadow off), Pencil (Darker/Lighter)
Master-making Time	Approx. 20 seconds (for A4/landscape/100% reproduction ratio)
Printing Area (max.)	251 mm × 357 mm ($9\frac{7}{8}$ " × $14\frac{1}{16}$ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 163%, 141%, 122%, 116% Standard reproduction ratio (reduction) : 87%, 82%, 71%, 61% Margin+ : 90 - 99 %
Print Speed	Approx. 60 - 130 pages per minute (five steps variable)
Print Position Adjustment	Vertical : ±15 mm ($\pm\frac{19}{32}$ ") Horizontal : ±10 mm ($\pm\frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 250 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LCD Touch Panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Color Drum (Cylinder), A4 (Letter) Drum (Cylinder) W, Wide Stacking Tray, Key Card Counter, Job Separator, Document Storage Card, Card Feed kit, Envelope Feed Kit, Stand, Ink/ Master Holder, RISO Network Card
Power Source	EZ531A: 220V~, 60Hz, 1.6A
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 103 kg (227 lb)
Safety Standard	IEC-60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- Please note that due to improvements and changes to the machine, some images and explanations in this manual may not correspond to your machine.
- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

12) Specification: EZ571**RISO EZ571**

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22 lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the Auto Document Feeder AF-VI : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22 lb) or less When using the Auto Document Feeder AF-VI : 50 g/m ² (13-lb bond) - 128 g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64 g/m ² (17-lb bond))
Print Paper Weight	46g/m ² (12-lb bond) - 210g/m ² (110-lb index)
Image Processing mode	Line, Photo (Standard/Portrait/Group), Duo (Line/Photo/Shadow off), Pencil (Darker/Lighter)
Master-making Time	Approx. 20 seconds (for A4/landscape/100% reproduction ratio)
Printing Area (max.)	291 mm × 413 mm ($11\frac{7}{16}$ " × $16\frac{1}{4}$ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 163%, 141%, 122%, 116% Standard reproduction ratio (reduction) : 87%, 82%, 71%, 61% Margin+ : 90 - 99 %
Print Speed	Approx. 60 - 130 pages per minute (five steps variable)
Print Position Adjustment	Vertical : ±15 mm ($\pm\frac{19}{32}$ ") Horizontal : ±10 mm ($\pm\frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 220 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LCD Touch Panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Color Drum (Cylinder), A4 (Letter) Drum (Cylinder) W, Wide Stacking Tray, Key Card Counter, Job Separator, Document Storage Card, Card Feed kit, Envelope Feed Kit, Stand, Ink/ Master Holder, RISO Network Card
Power Source	EZ571E: 220-240V~,50-60Hz, 1.6A EZ571A (For Korea): 220V~,60Hz, 1.6A EZ571A (For Taiwan): 110V~,60Hz, 3.4A EZ571A (For other countries): 220-240V~,50-60Hz, 1.6A
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 103 kg (227 lb)
Safety Standard	IEC-60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- Please note that due to improvements and changes to the machine, some images and explanations in this manual may not correspond to your machine.
- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

13) Specification: EZ591**RISO EZ591**

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22 lb) or less), sheet
Original Size (max./min.)	When using the Glass Platen : 50 mm × 90 mm ($1\frac{31}{32}$ " × $3\frac{9}{16}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17") When using the Auto Document Feeder AF-VI : 100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Original Paper Weight	When using the Glass Platen : 10 kg (22 lb) or less When using the Auto Document Feeder AF-VI : 50 g/m ² (13-lb bond) - 128 g/m ² (34-lb bond)
Print Paper Size (max./min.)	100 mm × 148 mm ($3\frac{15}{16}$ " × $5\frac{27}{32}$ ") - 310 mm × 432 mm ($12\frac{3}{16}$ " × 17")
Paper Supply Capacity	1000 sheets (64 g/m ² (17-lb bond))
Print Paper Weight	46 g/m ² (12-lb bond) - 210 g/m ² (110-lb index)
Image Processing mode	Line, Photo (Standard/Portrait/Group), Duo (Line/Photo/Shadow off), Pencil (Darker/Lighter)
Master-making Time	Approx. 20 seconds (for A4/landscape/100% reproduction ratio)
Printing Area (max.)	291 mm × 425 mm ($11\frac{7}{16}$ " × $16\frac{3}{4}$ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 200%, 154%, 129%, 121% Standard reproduction ratio (reduction) : 78%, 65%, 61%, 50% Margin+ : 90 - 99 %
Print Speed	Approx. 60 - 130 pages per minute (five steps variable)
Print Position Adjustment	Vertical : ± 15 mm ($\pm 1\frac{9}{32}$ ") Horizontal : ± 10 mm ($\pm \frac{3}{8}$ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 215 sheets per roll)
Master Disposal Capacity	100 sheets
User Interface	LCD Touch Panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI, Color Drum (Cylinder), A4 (Letter) Drum (Cylinder) W, Wide Stacking Tray, Key Card Counter, Job Separator, Document Storage Card, Card Feed kit, Envelope Feed Kit, Stand, Ink/ Master Holder, RISO Network Card
Power Source	EZ591U : 100-120/220-240V~, 50-60Hz, 3.4A/1.6A
Dimensions	When in use : 1415 mm(W) × 655 mm(D) × 665 mm(H) ($55\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H)) When in storage : 780 mm(W) × 655 mm(D) × 665 mm(H) ($30\frac{23}{32}$ "(W) × $25\frac{25}{32}$ "(D) × $26\frac{3}{16}$ "(H))
Weight	Approx. 103 kg (227 lb)
Safety Standard	IEC-60950-1 compliant, Indoor, pollution degree 2*1, At altitudes of 2000m or lower

Note:

- Please note that due to improvements and changes to the machine, some images and explanations in this manual may not correspond to your machine.
- The specifications are subject to change without prior notice.

*1 The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

CHAPTER 3: MAIN DRIVE

Contents

Disassembly	6
1. Removing the Pressure Spring	6

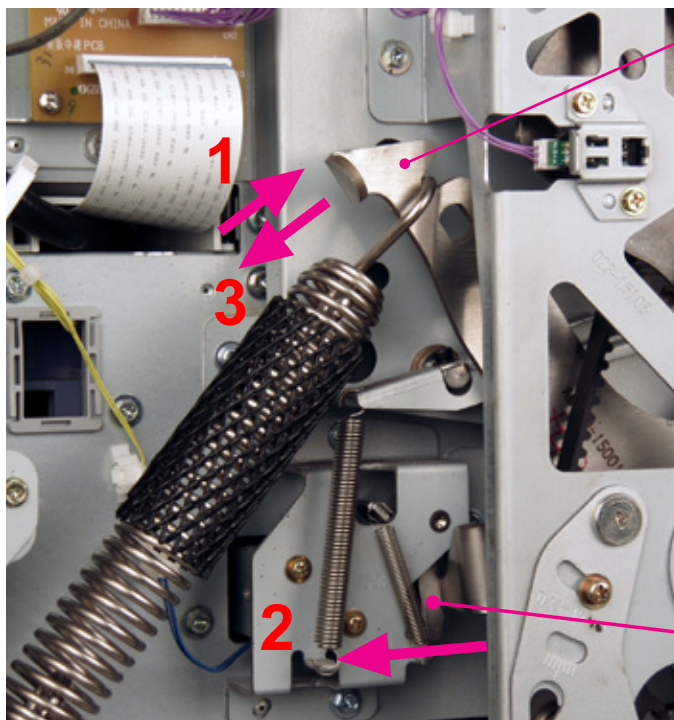
Disassembly

EZ2	EZ3	EZ5
#	O	O

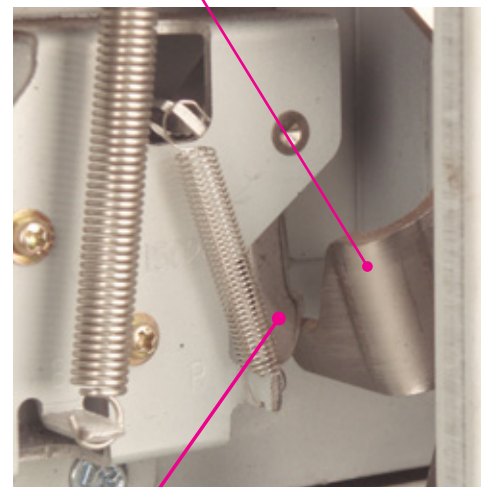
No pressure control mechanism on EZ2.

1. Removing the Pressure Spring

- (1) Make confidential master on the Print drum.
- (2) Run Test mode No.908 (Pressure control maintenance positioning adjustment), remove the Print drum and switch OFF the machine power.
- (3) Remove the Rear cover, and swing open the Power supply unit and Mechanical control PCB bracket.
- (4) Push the Pressure lever over to the right and unhook the Solenoid lever from the Pressure lever. Then return the Pressure lever slowly to the left.
- (5) Remove the Pressure spring from the Pressure lever after removing the other end from the Pressure spring tension plate.



Pressure Lever



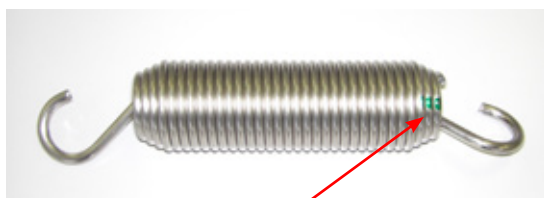
0309

Solenoid lever

Pressure lever

0308

Pressure Spring

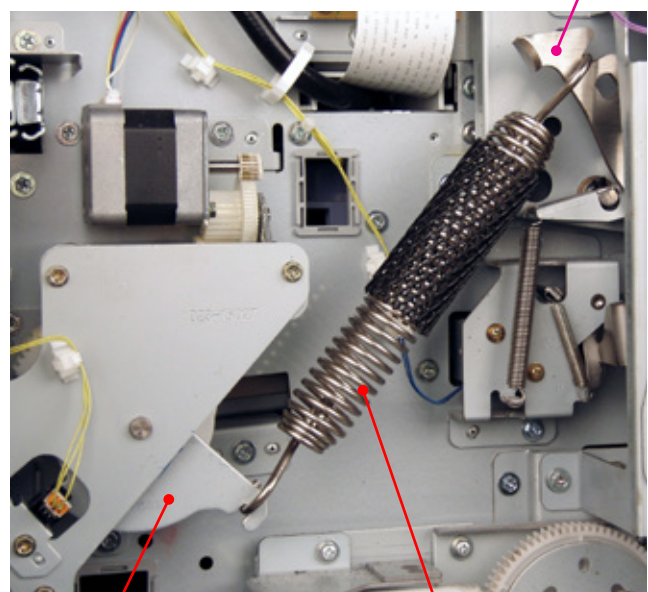


Marking

0330

Green marking = EZ3 & EZ5
No marking = EZ2

This is same for both the EZxx0 Series and EZxx1 Series machines.



0307

Pressure spring tension plate

Pressure spring

CHAPTER 8: PAPER EJECTION SECTION

Contents

9. Removing the Separator	18
---------------------------------	----

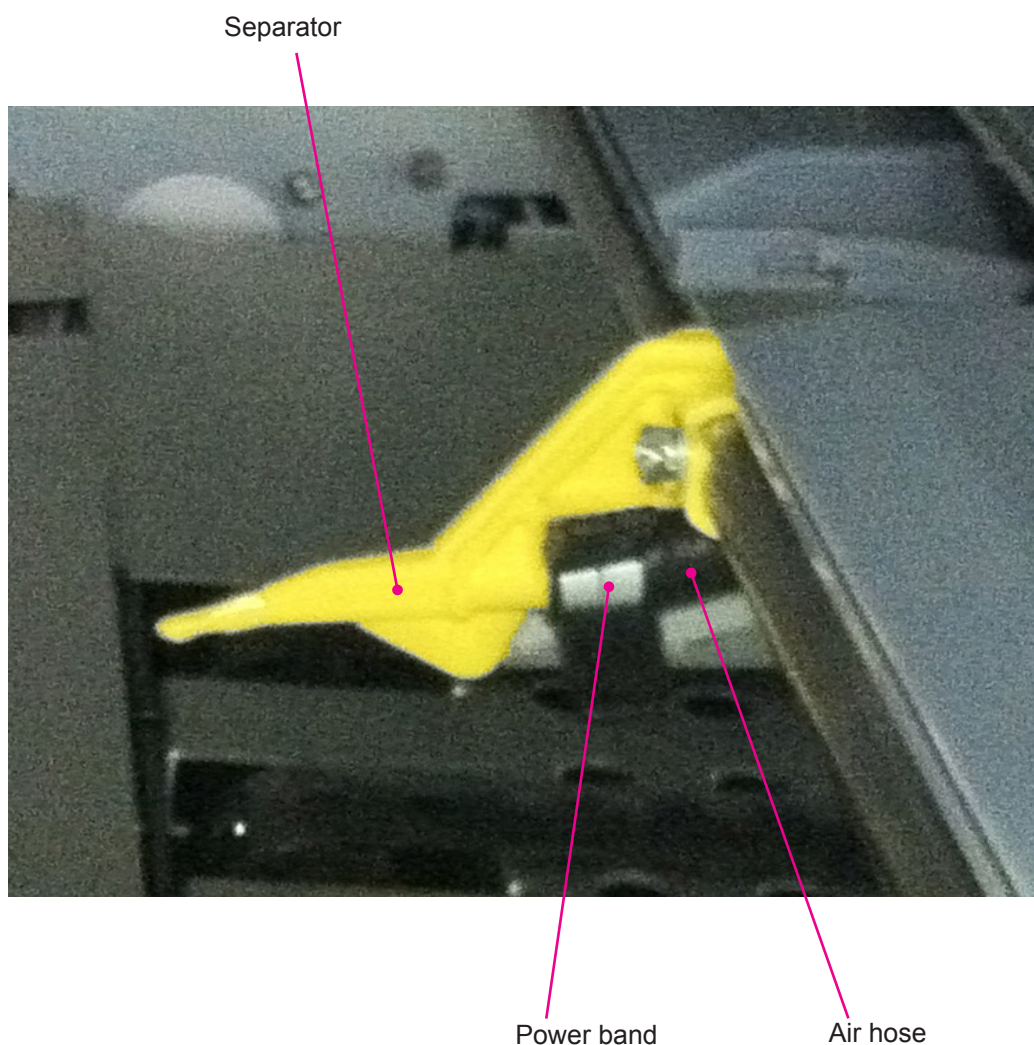
9. Removing the Separator

EZ2	EZ3	EZ5
O	O	O

- (1) Switch OFF the machine power and remove the following components.
 - Paper receiving tray
 - Separation fan unit
- (2) Pinch the Power-band, slide it away from the Separator, and pull the Air hose off the Separator.
- (3) Remove the Cap screws (M3 x 8 cap screw; 2 pcs) and remove the Separator from the shaft.

< Precautions in Reassembly >

The pinch knobs on the Power band should face towards you, as shown on the photograph when mounting it on the Air hose.

**NOTE :**

The **color** of the Separator is changed from ORANGE to YELLOW.

The shape, removal and mounting procedure stays the same.

Only the color is changed from orange to yellow.

This new YELLOW colored Separator can be used on both the EZxx0 and EZxx1 Series machines.

CHAPTER 17: PANEL MESSAGE

Contents

Following error messages are added from the last issued of the EZ Series Technical Manual (Revision 1.1R)

T03-545	[EZ2 & EZ3]	17-9
T05-619	[EZ2 & EZ3]	17-10
T11-631	[EZ5] & [EZ2 & EZ3]	17-11
T14-112	[EZ2 & EZ3]	17-13
T14-113	[EZ2 & EZ3]	17-13
T14-114	[EZ2 & EZ3]	17-13
T15-100	[EZ2 & EZ3]	17-14
T15-101	[EZ2 & EZ3]	17-14
T91-968	[EZ2 & EZ3]	17-18
T91-969	[EZ2 & EZ3]	17-18
T91-976	[EZ2 & EZ3]	17-18
T91-977	[EZ2 & EZ3]	17-18
T98-028	[EZ 5]	17-21
T98-029	[EZ 5]	17-21
T98-084	[EZ 5]	17-23
T98-777	[EZ 5]	17-23
T98-778	[EZ 5]	17-23
T98-787	[EZ 5]	17-23
T98-788	[EZ 5]	17-23
T98-789	[EZ 5]	17-23
T98-790	[EZ 5]	17-23
T98-791	[EZ 5]	17-23
T98-792	[EZ 5]	17-23
T98-921	[EZ2 & EZ3]	17-23
T98-961	[EZ2 & EZ3]	17-24
T98-978	[EZ2 & EZ3]	17-24
T98-979	[EZ2 & EZ3]	17-24
T98-983	[EZ2 & EZ3]	17-24
T98-984	[EZ2 & EZ3]	17-24
T99-014	[EZ2 & EZ3]	17-24
T99-181	[EZ2 & EZ3]	17-24
F04-905	[EZ2 & EZ3]	17-47
F04-906	[EZ2 & EZ3]	17-47

EZ5		EZ2 & EZ3	
Error Type	T03 [Clamp motor lock]	Error Type	T03 [Clamp motor lock]
LCD Display	T03-xxx	LED Display	LED 3 (Print drum area)
Description	!!System Error!! Press Reset Key If Recovery has Failed, Call Service	Error position	
To reset display	Press the <RESET> key.	To reset display	Press the <RESET> key.
Error Point	Error Conditions	Error Point	Error Conditions
507	The Clamp sensor A is ON after the clamp release action is completed.	507	The Clamp sensor A is ON after the clamp release action is completed.
508	The Clamp sensor A is ON after the A-position compensating movement is completed.	508	The Clamp sensor A is ON after the A-position compensating movement is completed.
545	The Clamp unit is not in the home position while the Print drum is in movement (cause due to the Clamp motor).	545	The Clamp unit is not in the home position while the Print drum is in movement (cause due to the Clamp motor).

Error Messages **T03-545** exists on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T05 [Vertical print positioning pulse motor lock]	Error Type	T05 [Vertical print positioning pulse motor lock]
LCD Display	T05-xxx !!System Error!!	LED Display	LED 7 (Paper ejection area)
Description	Press Reset Key If Recovery has Failed, Call Service	Error position	
To reset display	Press the <RESET> key. (Overflow sensor must be OFF)	To reset display	Press the <RESET> key. (Overflow sensor must be OFF)
Error Point	Error Conditions	Error Point	Error Conditions
605	Even though the Vertical print positioning pulse motor stopped according to the Vertical print positioning sensor detection, the stopping position does not correspond with the programmed position. (GA control error).	605	Even though the Vertical print positioning pulse motor stopped according to the Vertical print positioning sensor detection, the stopping position does not correspond with the programmed position. (GA control error).
612	The Print positioning key is pressed with vertical print position information undefined.	612	The Print positioning key is pressed with vertical print position information undefined.
619	The Vertical print positioning pulse motor does not end its operation within the set period during the recovery movement to rotate -98 pulses.	619	The Vertical print positioning pulse motor does not end its operation within the set period during the recovery movement to rotate -98 pulses.
632	The Vertical print positioning pulse motor does not end its operation within the set period in the pulse count stop mode, or in the sensor stop mode after the actuator is detected by the sensor.	632	The Vertical print positioning pulse motor does not end its operation within the set period in the pulse count stop mode, or in the sensor stop mode after the actuator is detected by the sensor.

Error Messages **T05-619** and **T05-632** exist on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T11 [Print pressure pulse motor lock]	Error Type	T11 [Print pressure pulse motor lock]
LCD Display	T11-xxx	LED Display	LED 3 (Print drum area)
Description	!!System Error!! Press Reset Key If Recovery has Failed, Call Service	Error position	
To reset display	Press the <RESET> key to recovery operation (Return to home position)	To reset display	Press the <RESET> key to recovery operation (Return to home position)
Error Point	Error Conditions	Error Point	Error Conditions
600	The Pressure HP sensor does not switch ON within 3.9 seconds after the Pressure control pulse motor activated towards higher pressure during home positioning operation.	600	The Pressure HP sensor does not switch ON within 5 seconds after the Pressure control pulse motor activated towards higher pressure during home positioning operation.
601	The Pressure HP sensor does not switch OFF within 4.6 seconds after the Pressure control pulse motor activated towards lower pressure during home positioning operation.	601	The Pressure HP sensor does not switch OFF within 5 seconds after the Pressure control pulse motor activated towards lower pressure during home positioning operation.
602	Even though the Pressure control pulse motor stopped according to the Pressure HP sensor detection, the stopping position does not correspond with the programmed position. (GA control error).	602	Even though the Pressure control pulse motor stopped according to the Pressure HP sensor detection, the stopping position does not correspond with the programmed position. (GA control error).
614	The Pressure control pulse motor does not complete its movement even after 1.2 time the set period passed from the print pressure HP movement to move -1000 pulses.	614	The Pressure control pulse motor does not complete its movement even after 7 seconds from the print pressure HP movement to move -1000 pulses.
631	The Pressure control pulse motor does not end its operation within the set period in the pulse count stop mode, or in the sensor stop mode after the actuator after the actuator is detected by the sensor.	631	The Pressure control pulse motor does not end its operation within the set period in the pulse count stop mode, or in the sensor stop mode after the actuator is detected by the sensor.

The **RED LINE** crossed words are erased on Error Message **T11-631** on **EZ5** machines for both the existing EZ5xx0 and the new EZ5xx1 Series.

Error Messages **T11-631** exists on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T14 [Flatbed error]	Error Type	T14 [Flatbed error]
LCD Display	T14-xxx	LED Display	LED 8 (Image scanning area)
Description	!!System Error!! Press Reset Key If Recovery has Failed, Call Service	Error position	
To reset display	Press the <RESET> key.	To reset display	Press the <RESET> key.
Error Point	Error Conditions	Error Point	Error Conditions
112	The FB/AF HP sensor does not go OFF within given time.	112	The FB/AF HP sensor does not go OFF within given time.
113	The FB/AF HP sensor does not go ON within given time.	113	The FB/AF HP sensor does not go ON within given time.
114	Incorrect main-unit data.	114	Incorrect main-unit data.
115	The scanner operation is not completed within the set time.	115	The scanner operation is not completed within the set time.
116	Timeout error for black shading compensation.	116	Timeout error for black shading compensation. (EZ3/EV3 only)

Error Messages **T14-112** **T14-113** and **T14-114** exist on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T15 [AF error]	Error Type	T15 [AF error]
LCD Display	T15-xxx	LED Display	LED 8 (Image scanning area)
Description	!!System Error!! Press Reset Key If Recovery has Failed, Call Service	Error position	
To reset display	Turn the power OFF and ON.	To reset display	Turn the power OFF and ON.
Error Point	Error Conditions	Error Point	Error Conditions
100	The AF read sensor adjustment error.	100	The AF read sensor adjustment error.
101	AF-EEPROM error.	101	AF-EEPROM error.
110	ABC (auto-base-control) timeout. The original does not move from the ABC scanning position on the AF unit.	110	ABC (auto-base-control) timeout. The original does not move from the ABC scanning position on the AF unit.
111	Operation command was made to the AF unit without 24 volts supplied to the AF unit.	111	Operation command was made to the AF unit without 24 volts supplied to the AF unit.
130	Timeout error in receiving reply from the AF unit after command signal was sent from the Riso printer to the AF unit.	130	Timeout error in receiving reply from the AF unit after command signal was sent from the Riso printer to the AF unit.

Error Messages **T15-100** and **T91-101** exist on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T91 [Panel EEPROM error] or [RTC error]	Error Type	T91 [Panel EEPROM error] or [RTC error]
LCD Display	T91-xxx	LED Display	No Indication
Description	!!System Error!! Press Reset Key If Recovery has Failed, Call Service	Description	
To reset display	Press the <RESET> Key.	To reset display	Press the <RESET> Key.
Error Point	Error Conditions	Error Point	Error Conditions
013	Time data from RTC is incorrect	013	Time data from RTC is incorrect
968	Panel EEPROM read error.	968	Panel EEPROM read error.
969	Panel EEPROM write error.	969	Panel EEPROM write error.
976	Panel EEPROM check-sum error.	976	Panel EEPROM check-sum error.
977	Panel EEPROM verify error.	977	Panel EEPROM verify error.

Error Messages **T91-968**, **T91-969**, **T91-976** and **T91-977** exist on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T98 [Hardware error]	Error Type	T98 [Hardware error]
LCD Display	T98-xxx	LED Display	No indication
Description	!!System Error!! Press Reset Key If Recovery has Failed, Call Service	Error position	
To reset display	Turn the power OFF and ON.	To reset display	Turn the power OFF and ON.
Error Point	Error Conditions	Error Point	Error Conditions
028	Test Mode No. 103 [Machine Test Mode Data Recording] ended in error.		
029	Test Mode No. 105 [Machine Test Mode Data Re-store] ended in error.		

Error Messages **T98-028** and **T98-029** exist on **EZ5** machines for both the existing EZ5xx0 and the new EZ5xx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T98 [Hardware error]	Error Type	T98 [Hardware error]
LCD Display Description	T98-xxx !!System Error!! Press Reset Key If Recovery has Failed, Call Service	LED Display Error position	No indication
To reset display	Turn the power OFF and ON.	To reset display	Turn the power OFF and ON.
084	Communication error between NeoROSA PCB and MCTL PCB (20) - on NeoROSA PCB side.	084	Communication error between NeoROSA PCB and MCTL PCB (20) - on NeoROSA PCB side.

777	Unsuccessful file making by Test Mode No.103 [Machine Test Mode Data Recording].		
778	Unsuccessful directry making by Test Mode No.103 [Machine Test Mode Data Recording].		
787	File is not found when Test Mode No. 105 [Machine Test Mode Data Re-store] is activated.		
788	Wrong file data when Test Mode No. 105 [Machine Test Mode Data Re-store] is activated.		
789	Wrong file serial number when Test Mode No. 105 [Machine Test Mode Data Re-store] is activated.		
790	The file version is new when Test Mode No. 105 [Machine Test Mode Data Re-store] is activated.		
791	Error in rebooting the machine after Test Mode No. 105 [Machine Test Mode Data Re-store] is activated.		
792	Directry is not found when Test Mode No. 105 [Machine Test Mode Data Re-store] is activated.		

Error Messages **T98-084, T98-777, T98-778, T98-787, T98-788, T98-789, T98-790, T98-791** and **T98-792** exist on **EZ5** machines for both the existing EZ5xx0 and the new EZ5xx1 Series.

EZ5		EZ2 & EZ3	
921	The USB controller chip is not responding when PC and printer is connected by USB cable.	921	The USB controller chip is not responding when PC and printer is connected by USB cable.

Error Messages **T98-921** exist on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T98 [Hardware error]	Error Type	T98 [Hardware error]
960	Unsuccessful readout from the NeoROSA PCB flash memory.	960	Unsuccessful readout from the NeoROSA PCB flash memory.
961	NeoROSA PCB flash memory unused.	961	NeoROSA PCB flash memory unused.
978	Incorrect power ON command from MCTL PCB when machine power turned ON.	978	Incorrect power ON command from MCTL PCB when machine power turned ON.
979	Abnormal flash memory setting on the NeoROSA PCB.	979	Abnormal flash memory setting on the NeoROSA PCB.
983	24V-C does not go ON. (Possible broken Fuse for 24V-C area).	983	24V-C does not go ON. (Possible broken Fuse for 24V-C area).
984	24V-C does not go OFF.	984	24V-C does not go OFF.

Error Messages **T98-960**, **T98-961**, **T98-978**, **T98-979**, **T98-983** and **T98-984** exist on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	T99 [Software error]	Error Type	T99 [Software error]
LCD Display	T99-xxx	LED Display	No indication
Description	!!System Error!! Press Reset Key If Recovery has Failed, Call Service	Error position	
To reset display	Turn the power OFF and ON.	To reset display	Turn the power OFF and ON.
Error Point	Error Conditions	Error Point	Error Conditions
014	The sub-microcomputer is physically broken.	014	The sub-microcomputer is physically broken.
181	Timeout on Image processing time.	181	Timeout on Image processing time.

Error Message **T99-014** exists on **EZ5** machines for both the existing EZ5xx0 and the new EZ5xx1 Series.

Error Messages **T99-014** and **T99-181** exist on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

EZ5		EZ2 & EZ3	
Error Type	F04 [User Control: Limit count]	Error Type	F04 [User Control: Limit count]
LCD Display	F04-xxx	LED Display	No indication
Description	Reached to the limit count Contact the administrator	Error position	
To reset display	Touch [Close], or press the <STOP> key or the <RESET> key.	To reset display	Press the <RESET> key.
Error Point	Error Conditions	Error Point	Error Conditions
905	Master count reached to limit count.	905	Master count reached to limit count.
906	Paper count reached to limit count.	906	Paper count reached to limit count.

Error Messages **F04-905** and **F04-906** exist on **EZ2** and **EZ3** machines for both the existing EZxxx0 and the new EZxxx1 Series.

MEMO

CHAPTER 18: TEST MODE

These test modes apply to both the EZxx0 and EZxx1 machine models.

Contents

1. Test Mode Procedures	2
EZ2 & EZ3 Series.....	2
EZ5 Series.....	3
2. Individual Test Procedures	4
3. System & Control Panel Test Mode	5
4. Image Processing / Scanning Test Mode	15
5. Master Making / Master Disposal Test Mode	18
6. Paper Feeding / Paper Ejection Test mode	24
7. Print Drum / Printing Test Mode.....	33
8. Protected Area Test Mode	40
9. Options (AF) Test Mode	44
10.Options (Job Separator) Test Mode.....	46
11.Options (Memory) Test Mode	47
12.Options (Linked Printer) Test Mode.....	48
13.Options (Vender) Test Mode.....	49

1) Test Modes which are deleted from the book :

0089, 0178, 0746 and 0747.

These test modes, list here, are typed within **RED** boxes and with **LIGHT BLUE** background in this book.

2) Test Modes in which the typing errors are corrected on the book :

0578, 0949, 0950 and 1224.

3) Test Modes in which the default settings are changed on the book :

0779 and 0942.

4) Test Modes which are added on the book :

0120, 0122, 0126, 0368, 0510, 0528, 0545, 0576, 0579, 0951, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3570 and 3571.

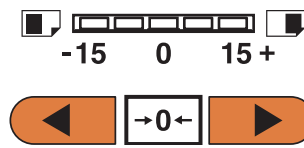
1. Test Mode Procedures

EZ2 & EZ3 Series

1) Start-up Procedure

Switch ON the machine power while simultaneously pressing the two print position keys on the operation panel. This initiates the test mode in standby mode.

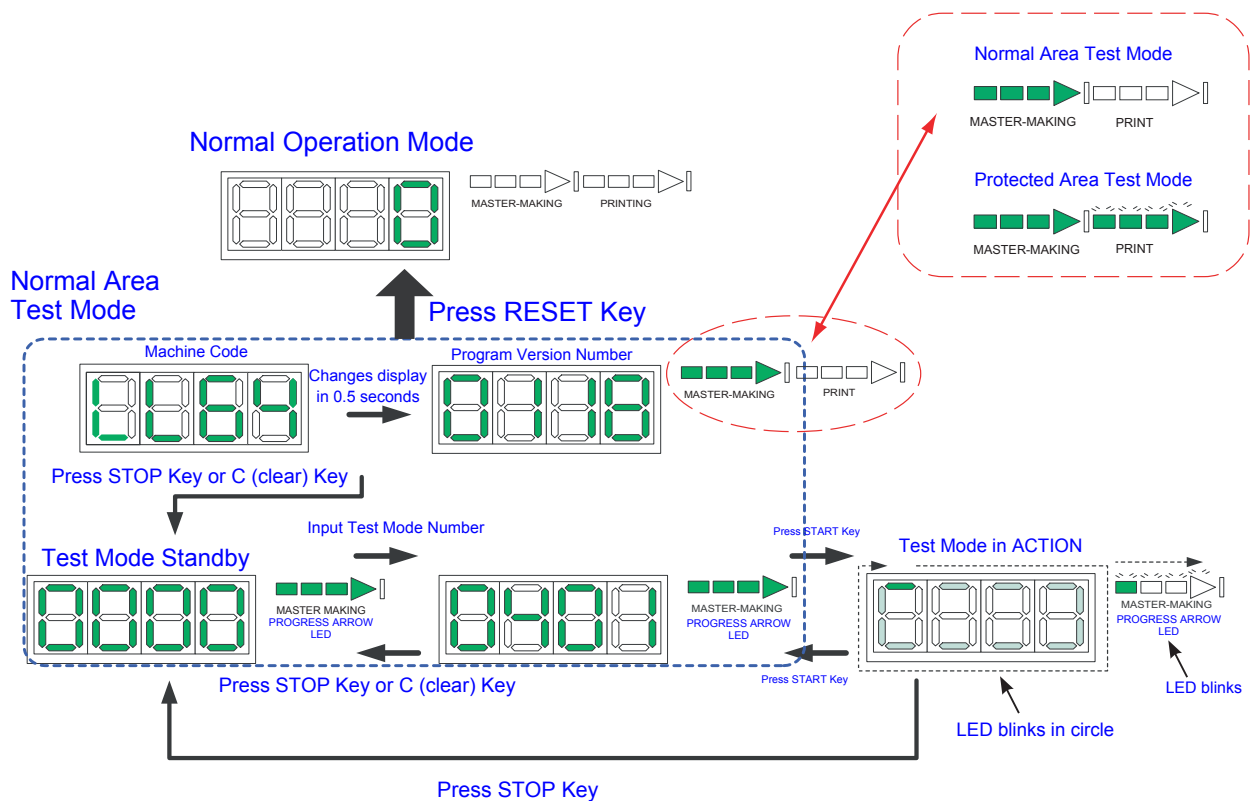
PRINT POSITION



Press the two print position keys simultaneously and turn ON the machine power.

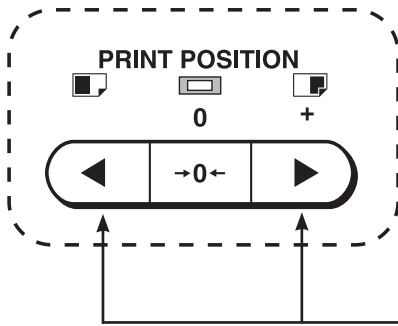
2) Activation & Exit

Follow the procedure explained on the illustration below for the activation of the test mode and ending the test mode.



EZ5 Series**1) Start-up Procedure**

Switch ON the machine power while simultaneously pressing the two print position keys on the operation panel. This initiates the test mode in standby mode.



Press the two print position keys simultaneously and turn ON the machine power.

2) Operating Procedure

Test mode numbers can be entered (selected) via [Key entry] or [Menu selection].

a) Key entry procedure

- (1) In standby mode, enter the number of the test mode to be run using the numeric keys. If you make a mistake during entry, you can perform entry once again by pressing the [C] key.
- (2) Press the [START] key to initiate Test mode operations.
- (3) Press the [STOP] or [START] key to end Test mode and return to standby or operation standby modes.

* In data setting mode, after setting the new data, press the [START] key to confirm the modified data and return to standby mode. Instead, if the [STOP] key is pressed, the newly input data is cancelled and the existing data setting remains.

b) Menu selection method

- (1) While in standby mode, select the unit containing the test item to be run from the Test mode menu.
 - Press the unit name on the LCD screen. (Unit name is highlighted.)
 - The Test mode sub-menu appears.
- (2) Select the test item to be run from the Test mode sub-menu.
 - Press the test item on the LCD screen. (Test item is highlighted.)
- (3) Press the [START] key to initiate Test mode operations.
- (4) Press the [STOP] or [START] key to end the Test mode operation and return to standby mode or operation standby mode.

* After setting data, press the [START] key to confirm the modified data and return to standby mode. Press the [STOP] key to cancel the settings before returning to standby mode.

3) Ending Procedure

To exit the Test mode, press the [RESET] key for at least 1 second during test mode standby mode or test mode operation standby mode.

2. Individual Test Procedures

1) Checking sensors and switches

Indicates the sensor and switch status with audible beeps.

Detected: Buzzer sounds at 0.1 second intervals (short beeps).

Not detected: Buzzer sounds at 0.5 second intervals (long beeps).

2) Checking motors and solenoids

Switch on by pressing the [Start] key, then press the [START] or [STOP] key to switch off.

* Error checking is not performed during the operation. Note that moving parts may lock if at their limit positions.

3) Checking unit operations

- (1) Switch on by pressing the [Start] key, then initiate unit operation. Error checking is performed in basically the same way as for normal operation. Some operations will halt when the sequence is complete, while other operations will continue until you press a key ([STOP] or [START]).
- (2) A continuous audible tone is emitted to indicate an error. To cancel errors, press the [RESET] key.

4) Data clear

Press the [Start] key to clear the data. [In Action] message appears while clearing the data. The activating ends automatically and [End] message appears when completed.

5) Data check

Press the [Start] key to display data.

* Data check only displays the various settings. These settings cannot be changed here.

6) Data setting

- (1) Press the [Start] key to display and change the data currently set.
 - (2) Change data using the numeric keys. Use the [*] key to change the display.
 - (3) Once settings have been changed, press the [START] key to confirm the data and return to standby mode. Press the [STOP] key to cancel the settings and return to standby mode.
- * The settings will be set to their default values if values beyond the specified setting ranges are entered. The settings are also set to their default values if values are entered in units other than the units specified.

3. System & Control Panel Test Mode

EZ5			EZ2 & EZ3		
No	Sensor & Switch Check				
0001	Wakeup Key		Wakeup Key		
		ON: Key pressed		ON: Key pressed	
0002	Solenoid counter connection signal		Solenoid counter connection signal		
		ON: Solenoid counter connected		ON: Solenoid counter connected	
0003	24V A output signal		24V A output signal		
		ON: 24V-A (24 volts) is output		ON: 24V-A (24 volts) is output	
0004	24V B output signal		24V B output signal		
		ON: 24V-B (24 volts) is output		ON: 24V-B (24 volts) is output	
0005	Rear cover safety switch		Rear cover safety switch		
		ON: Rear cover is attached		ON: Rear cover is attached	
No.	Motor & Solenoid				
0062	Wake-up LED		Wake-up LED		
		LED Illuminates		LED Illuminates	
No.	Unit Check				
0080	Test Print A (checkered)		Test Print A (checkered)		
		Creates Test pattern 1 (Checker Flag)		Creates Test pattern 1 (Checker Flag)	
0081	Test Print B (cross stripes)		Test Print B (cross stripes)		
		Creates Test pattern 2 (Cross Lines)		Creates Test pattern 2 (Cross Lines)	
0082	Test Print C (Dot1)		Test Print C (Dot1)		
		Creates Test pattern 4 (Dot 1)		Creates Test pattern 4 (Dot 1)	
0083	Test Print D (Dot2)		Test Print D (Dot2)		
		Creates Test pattern 5 (Dot 2)		Creates Test pattern 5 (Dot 2)	
0084	Test Print E (Dot1 + Cross Lines)		Test Print E (Dot1 + Cross Lines)		
		Creates Test pattern 6 (Dot 1 + Cross Lines)		Creates Test pattern 6 (Dot 1 + Cross Lines)	
0085	Test Print F (Dot2 + cross stripes)		Test Print F (Dot2 + cross stripes)		
		Creates Test pattern 7 (Dot 2 + Cross Lines)		Creates Test pattern 7 (Dot 2 + Cross Lines)	
0086	Test Print G (Dot3)		Test Print G (Dot3)		
		Creates Test pattern 8 (Dot 3)		Creates Test pattern 8 (Dot 3)	
0087	Paper-Feed Test (continuous feeding)		Paper-Feed Test (continuous feeding)		
		Speed 1 = 60rpm Speed 2 = 80rpm Speed 3 = 100rpm Speed 4 = 120rpm Speed 5 = 130rpm		Speed 1 = 60rpm Speed 2 = 80rpm Speed 3 = 100rpm Speed 4 = 120rpm Speed 5 = 130rpm	
0088	Low-Speed Printing Operation		Low-Speed Printing Operation		
		Prints continuously at 15 rpm.		Prints continuously at 15 rpm.	
0090	Firmware download		Firmware download		
		Firmware is downloaded when START key is pressed.		Firmware is downloaded when START key is pressed.	
0094	Unit Initialization		Unit Initialization		
		Mechanical initialization is made. (Scanner, TPH, Compression plate,Clamp unit, Vertical print position, Printing pressure)		Mechanical initialization is made. (Scanner, TPH, Compression plate,Clamp unit, Vertical print position, Printing pressure)	
0095	System Configuration Data Output		System Configuration Data Output		
		Creates a master for the CI system data.		Creates a master for the CI system data.	

EZ5			EZ2 & EZ3		
0097	Data-Setting & Error-History Output				
		Creates a master for the list of data-setting changes and the error history.			
0101	Machine Clock Activation		Machine Clock Activation		
		Activates time set by Test Modes from No.0171 through 0173. The new clock time set by test mode No. 0171 through No.0173 will not be applied unless this test mode No. 0101 is activated.		Activates time set by Test Modes from No.0171 through 0173. The new clock time set by test mode No. 0171 through No.0173 will not be applied unless this test mode No. 0101 is activated.	
0103	Machine Test Mode Data Recording		Machine Test Mode Data Recording		
		Stores the machine Test Mode settings into CF card.		Stores the machine Test Mode settings into CF card.	
0104	Print drum Test Mode Data Recording		Print drum Test Mode Data Recording		
		Stores the Print drum Test Mode settings in the EEPROM of the Print Drum PCB into CF card.		Stores the Print drum Test Mode settings in the EEPROM of the Print Drum PCB into CF card.	
0105	Machine Test Mode Data Re-store		Machine Test Mode Data Re-store		
		Writes the test mode settings retrieved in CF card by test mode No.0103 into the NeoROSA PCB.		Writes the test mode settings retrieved in CF card by test mode No.0103 into the EEPROM of Mechanical Control PCB..	
0106	Print Drum Test-Mode Data Re-store		Print Drum Test-Mode Data Re-store		
		Writes the test mode settings retrieved in CF card by test mode No.0104 into the Print Drum PCB EEPROM.		Writes the test mode settings retrieved in CF card by test mode No.0104 into the Print Drum PCB EEPROM.	
0107	Test Mode Data Back-up		Test Mode Data Back-up		
		Stores all the test mode numbers and settings, which are changed from the program default, are stored in CF card for record keeping purpose.		Stores all the test mode numbers and settings, which are changed from the program default, are stored in CF card for record keeping purpose.	
No.	Data Clear				
0110	Clearing Jam Status Data		Clearing Jam Status Data		
		This test mode can also be used to clear error data for items for which jam can otherwise be cleared only by the jam release procedure. Consumable errors cannot be cleared.		This test mode can also be used to clear error data for items for which jam can otherwise be cleared only by the jam release procedure. Consumable errors cannot be cleared.	
0111	Clearing User Memory		Clearing User Memory		
		Initializes data in user area memory to the programming defaults.		Initializes data in user area memory to the programming defaults.	
0112	Clearing Normal Area Test-Mode Data Memory [MACHINE]		Clearing Normal Area Test-Mode Data Memory [MACHINE]		
		Initializes all normal area test mode settings on the machine to their programming default values. The protected area test modes stay unchanged.		Initializes all normal area test mode settings on the machine to their programming default values. The protected area test modes stay unchanged.	
0113	Maintenance Count Clear (master making)		Maintenance Count Clear (master making)		
		Clears the master making maintenance call message by resetting the count to zero.		Clears the master making maintenance call message by resetting the count to zero.	
0114	Maintenance Count Clear (printing)		Maintenance Count Clear (printing)		
		Clears the printing maintenance call message by resetting the count to zero.		Clears the printing maintenance call message by resetting the count to zero.	
0115	Maintenance Count Clear (print drum)		Maintenance Count Clear (print drum)		
		Clears the print drum maintenance call message by resetting the count to zero.		Clears the print drum maintenance call message by resetting the count to zero.	
0116	Set-up Wizard Initialize				
		Initializes the set-up wizard to the out-of-the-factory condition.			

EZ5			EZ2 & EZ3		
0117	Clearing Normal Area Test-Mode Data Memory [PRINT DRUM]		Clearing Normal Area Test-Mode Data Memory [PRINT DRUM]		
		Initializes all normal area test mode settings within the EEPROM of the print drum to their programming default values. The protected area test modes stay unchanged.		Initializes all normal area test mode settings within the EEPROM of the print drum to their programming default values. The protected area test modes stay unchanged.	
No.	Data Check				
0120	System Parameter Adjustment Record		System Parameter Adjustment Record		
		Displays the test mode numbers and settings for all the test modes changed from the program default settings. (Does not list those in the protected test mode.)		Displays the last test mode number and settings for the test mode changed from the program default setting. (Does not list those in the protected test mode.)	
0121	Switch Action Record				
		Displays error codes for set-switch errors which caused the machine to stop. (Most recent 8 items)			
0122	Error Record		Error Record		
		Lists error code history of the error types T, A and B which occurred on the machine. (Most recent 64 items)		Displays the last error code history of the error types T, A and B which occurred on the machine. (The last displayed error code)	
0123	Maintenance Count				
		Displays all the maintenance counter values (master making, printing, and print-drum).			
0124			Machine serial number display (1)		
				Displays the first 4 digits of the machine serial number.	
0125			Machine serial number display (2)		
				Displays the last 4 digits of the machine serial number.	
0126	Optional Configuration Check		Sub-microcomputer version display		
		Displays optional peripherals/devices currently connected.		Displays the version number of the sub-microcomputer. Example: 101 = Version 1.01	
0127			AF connection status		
				Displays whether AF unit is connected. 0 : Not connected 1 : Connected (displays program version if ROM is set. Example: Displays 0101 for Ver.1.01	
0128			Job Separator connection status		
				Displays whether there is any Job Separator connection. 0 : Not connected 1 : Connected	
0129			NIC connection status		
				Displays whether there is any NIC (Network Card) connection. 0 : Not connected 1 : Connected	

EZ5		EZ2 & EZ3	
0130		MCTL PCB program version display	
		Displays Mechanical control PCB program version. Example: Displays 0101 for Ver.1.01	
0131		ROSA PCB program version display	
		Displays NeoROSA program version. Example: Displays 0101 for Ver.1.01	
0132	Download File Information		
	Displays the following: File name, Firmware type (MECHA, ROSA, DSP), Machine type, Firmware version number, File date, Media type (U=USB, C=CF card)		
0135	Paper Size ID display	Paper Size ID display	
	Displays paper ID decided according to paper size VR and paper size detection sensor. <Which ID to display depends on the machine model> 00 No paper 01 A3 02 B4 03 A4 04 A4 landscape 05 B5 06 B5 landscape 07 A5 08 A5 landscape 09 B6 10 B6 landscape 11 Post card 12 Post card landscape 13 Ledger 14 Legal 15 Letter 16 Letter landscape 17 Statement 18 Statement landscape 19 Foolscap 30 Chinese Paper No. K16 31 Chinese Paper No. K16 landscape 32 Chinese Paper No. K8 50 Paper size undefined 1 (paper size det. sensor : ON) 51 Paper size undefined 2 (paper size det. sensor : OFF)	Displays paper ID decided according to paper size VR and paper size detection sensor. <Which ID to display depends on the machine model> 00 No paper 01 A3 02 B4 03 A4 04 A4 landscape 05 B5 06 B5 landscape 07 A5 08 A5 landscape 09 B6 10 B6 landscape 11 Post card 12 Post card landscape 13 Ledger 14 Legal 15 Letter 16 Letter landscape 17 Statement 18 Statement landscape 19 Foolscap 30 Chinese Paper No. K16 31 Chinese Paper No. K16 landscape 32 Chinese Paper No. K8 50 Paper size undefined 1 (paper size det. sensor : ON) 51 Paper size undefined 2 (paper size det. sensor : OFF)	
0137		Maintenance counter reading (Master Making)	
		Display of 1 = 100 master makings Example: 1234 display = 123,400 master makings.	
0138		Maintenance counter reading (Printing)	
		Display of 1 = 1000 printings. Example: 1234 display = 1,234,000 prints.	

EZ5			EZ2 & EZ3	
0139			Maintenance counter reading (Print Drum)	
				Display of 1 = 1000 printings. Example: 1234 display = 1,234,000 prints.
No.	Data Setting			
0140			Scanning & Master Making Independent Mode	
				Selection to make the scanning & master making action together with the master removal action or to make the two actions separately.
				Setting: 0 : Together <default> 1 : Independent
0142	Test Mode Display Language Selection			
		Display language selection.		
		Setting: 0 : Normal 1 : Japanese 2 : English 3 : Chinese		
0143	Maintenance: Master Count Entry		Maintenance: Master Count Entry	
		Sets the number of master making at which the maintenance-call message is displayed.		Sets the number of master making at which the maintenance-call message is displayed.
		Range : 0 to 999,900 master making Unit : 1 = 100 master making Default : 0 : No maintenance call display		Range : 0 to 999,900 master making Unit : 1 = 100 master making Default : 0 : No maintenance call display
0144	Maintenance: Copy Count Entry		Maintenance: Copy Count Entry	
		Sets the number of prints at which the maintenance-call message is displayed.		Sets the number of prints at which the maintenance-call message is displayed.
		Range : 0 to 9,999,000 printing Unit : 1 = 1000 printing Default : 0 : No display maintenance call display		Range : 0 to 9,999,000 printing Unit : 1 = 1000 printing Default : 0 : No display maintenance call display
0145	Maintenance: Drum Meter Entry		Maintenance: Drum Meter Entry	
		Sets the number of print-drum prints at which the maintenance-call message is displayed (for each print drum).		Sets the number of print-drum prints at which the maintenance-call message is displayed (for each print drum).
		Range : 0 to 9,999,000 printing Unit : 1 = 1000 printing Default : 0 : No display maintenance call display		Range : 0 to 9,999,000 printing Unit : 1 = 1000 printing Default : 0 : No display maintenance call display
0146	Scanning Priority in Master Making			
		To prevent machine movement vibration from affecting the scanning quality, the master removal and master making action takes after the scanning, if selected to ON.		
		Setting: 0 : OFF <default> 1 : ON		
0150	Print Quantity Display Recovery			
		Selection of print quantity display after print job is finished. Displays either [0] or [previous print quantity].		
		Setting: 0 : Displays 0 <default> 1 : Displays previous print quantity		

EZ5		EZ2 & EZ3	
0151	Print Speed After Short Interval	Print Speed After Short Interval	
	Gradual print speed acceleration after short intervals between printing job.	Gradual print speed acceleration after short intervals between printing job.	
0152	Setting: 0 : Disabled <default> 1 : Enabled	Setting: 0 : Disabled 1 : Enabled <default>	
	Light Print Display Control	Light Print Display Control	
0153	Selects whether to display the [Light Print] button in the Functions Tab.	Selects whether to display the [Light Print] button in the Functions Tab.	
	Setting: 0 : Disabled <default> 1 : Enabled	Setting: 0 : Disabled <default> 1 : Enabled	
0154	Special Paper Control Basic Display Control		
	Selects whether to display the Special Paper Control button in the Admin. Tab.		
0155	Setting: 0 : Disabled <default> 1 : Enabled		
	Minimum Print Quantity Control		
0156	Enables/Disables making input changes by the User Mode.	Enables/Disables making input changes by the User Mode.	
	Setting: 0 : Disabled 1 : Enabled <default>	Setting: 0 : Disabled 1 : Enabled <default>	
0157	Counter Action Control	Counter Action Control	
	Enables/Disables copy counter & master counter (solenoid counter, software counter). This setting returns to default once the power is switched OFF.	Enables/Disables copy counter & master counter (solenoid counter, software counter). This setting returns to default once the power is switched OFF.	
0158	Setting: 0 : Counter Disabled 1 : Counter Enabled <default>	Setting: 0 : Counter Disabled 1 : Counter Enabled <default>	
0159	Warning Errors Display		
	Selection to display or not to display the warning errors F02, F10 and F43.		
0160	Setting: 0 : No display 1 : Displays <default>		
	Auto Multi-Up Recovery		
0161	Selects if the Multi-up stays active or becomes inactive after one Multi-up operation.		
	Setting: 0 : Change to inactive <default> 1 : Stays active		
0162	Program Print Auto-Repeat Setting	Program Print Auto-Repeat Setting	
	Selection to keep the program printing active or to change to inactive after one master-making with Auto-Print OFF.	Selection to keep the program printing active or to change to inactive after one master-making with Auto-Print OFF.	
0163	Setting: 0 : Changes to inactive <default> 1 : Stays active	Setting: 0 : Changes to inactive <default> 1 : Stays active	

EZ5		EZ2 & EZ3	
0162	Master Making Stand-by Cancel Time Setting	Master Making Stand-by Cancel Time Setting	
	When Master making mode is selected, the master making stand-by condition is cancelled according to the time set. If the set time is within 60s, the master making stand-by condition (TPH pressure, Clamp opening position, Scanner lamp ON) is cancelled in 60s. If set to over 60s, the Scanner lamp ON is cancelled after 60s, and other stand-by condition is cancelled after the set time.	When Master making mode is selected, the master making stand-by condition is cancelled according to the time set. If the set time is within 60s, the master making stand-by condition (TPH pressure, Clamp opening position, Scanner lamp ON) is cancelled in 60s. If set to over 60s, the Scanner lamp ON is cancelled after 60s, and other stand-by condition is cancelled after the set time.	
0165	Range : 0 to 180s (0 = No stand-by) Unit : 1 = 1s (1 second) Default: 180 (180s)	Range : 0 to 180s (0 = No stand-by) Unit : 1 = 1s (1 second) Default: 180 (180s)	
	RLP Mode display change timing selection		
0166	Timing adjustment for the display to change when using RLP auto-selection mode.		
	Range : -5 to +5 (0 to 2.5s) Unit : 1 = 0.25s (0.25 seconds) Default: 0 (1.25 seconds)		
0167	Maximum Print Quantity Control		
	Enable or disable the maximum print quantity setting, and also sets the maximum print quantity. Range : 0 (disabled) to 9999 (enabled) Unit : 1 = 1 print Default: 0 (disabled)		
0169	Paper ID Auto-Repeat Control		
	Selects if the paper data stays active or become inactive after power is turned OFF or RESET button is pressed. Setting: 0 : Stays active <default> 1 : Changes to inactive		
0170	Admin. Display Control		
	Selects if the Admin. Tab is displayed or not. Setting: 0 : Hide 1 : Display <default>		
0171	Consumable Storage Indication		
	Selects whether the consumable storage indication is displayed on the Admin. window. Setting: 0 : Hide <default> 1 : Display		
0171	Machine Clock Setting (YEAR)	Machine Clock Setting (YEAR)	
	Sets YEAR in clock. Test Mode No. 0101 must be activated after inputting test modes No. 0171 through No. 0173 to activate the new setting.	Sets YEAR in clock. Test Mode No. 0101 must be activated after inputting test modes No. 0171 through No. 0173 to activate the new setting.	
0171	Range : 2000 to 2199 (Year 2000 to 2199) Unit: 1 = 1 year Default: 2000 (Year 2000)	Range : 2000 to 2199 (Year 2000 to 2199) Unit: 1 = 1 year Default: 2000 (Year 2000)	

EZ5		EZ2 & EZ3	
0172	Machine Clock Setting (MONTH & DATE)	Machine Clock Setting (MONTH & DATE)	
	Sets MONTH/DATE in clock. Test Mode No. 0101 must be activated after inputting test modes No. 0171 through No. 0173 to activate the new setting.	Sets MONTH/DATE in clock. Test Mode No. 0101 must be activated after inputting test modes No. 0171 through No. 0173 to activate the new setting.	
	Left 2 digits= MONTH: 1 to 12 (January to December) Right 2 digits = DAY: 1 to 31 (Days 1 to 31) 1 = 1 month, 1 = 1 day Default: 0101 (January 1)	Left 2 digits= MONTH: 1 to 12 (January to December) Right 2 digits = DAY: 1 to 31 (Days 1 to 31) 1 = 1 month, 1 = 1 day Default: 0101 (January 1)	
0173	Machine Clock Setting (HOUR & MINUTE)	Machine Clock Setting (HOUR & MINUTE)	
	Sets HOUR/MINUTE in clock. Test Mode No. 0101 must be activated after inputting test modes No. 0171 through No. 0173 to activate the new setting.	Sets HOUR/MINUTE in clock. Test Mode No. 0101 must be activated after inputting test modes No. 0171 through No. 0173 to activate the new setting.	
	Left 2 digits = HOUR: 0 to 23 (0 to 23 hours) Right 2 digits = MINUTE: 0 to 59 (0 to 59 minutes) 1 = 1 hour, 1 = 1 minute Default : 0000 (0 hours, 0 minute)	Left 2 digits = HOUR: 0 to 23 (0 to 23 hours) Right 2 digits = MINUTE: 0 to 59 (0 to 59 minutes) 1 = 1 hour, 1 = 1 minute Default : 0000 (0 hours, 0 minute)	
0174	Chinese Paper No.16 (Width data setting)	Chinese Paper No.16 (Width data setting)	
	Sets paper width data for Chinese paper No.16	Sets paper width data for Chinese paper No.16	
	Range : 191 to 199 (191mm to 199mm) Unit : 1 = 1mm Default : 195 (195mm)	Range : 191 to 199 (191mm to 199mm) Unit : 1 = 1mm Default : 195 (195mm)	
0175	Chinese Paper No.8(width) No.16(length) data setting.	Chinese Paper No.8(width) No.16(length) data setting.	
	Sets paper width (No.8) & length (No.16) data	Sets paper width (No.8) & length (No.16) data	
	Range : 266 to 276 (266mm to 276mm) Unit : 1 = 1mm Default : 271 (271mm)	Range : 266 to 276 (266mm to 276mm) Unit : 1 = 1mm Default : 271 (271mm)	
0176	Chinese Paper No.8 (Length data setting)	Chinese Paper No.8 (Length data setting)	
	Sets paper length data for Chinese paper No.8	Sets paper length data for Chinese paper No.8	
	Range : 385 to 395 (385mm to 395mm) Unit : 1 = 1mm Default : 390 (390mm)	Range : 385 to 395 (385mm to 395mm) Unit : 1 = 1mm Default : 390 (390mm)	

EZ5		EZ2 & EZ3	
0181	File Data Transmit Function Setting		
	<p>Maintenance information, or print quantity information and count-charge mail activation or inactivation. This function does not exist on China specification machine.</p> <p>[MAINTENANCE INFORMATION] The [Maintenance Information] mail button becomes available in the Functions Tab when this test mode is selected to [1] and if the machine is equipped with NET-D;G2 optional card.</p> <p>[PRINT QUANTITY INFORMATION] The [Print Quantity Information] mail button becomes available in the Functions Tab when this test mode is selected to [2] and if the machine is equipped with NET-D;G2 optional card.</p> <p>[COUNT-CHARGE INFORMATION] The [Count-Charge Information] mail button becomes available in the Functions Tab when this test mode is selected to [2] and test mode No.0183 is selected to [1], and if the machine is equipped with NET-D;G2 optional card.</p>		
	<p>Setting:</p> <p>0 : Inactive <default> 1 : Maintenance Information (REV.) 2 : Print Quantity Information & Count Charge Information</p>		
0182	Counter / Stock Info. Mail Control		
	<p>Consumable stock data by e-mail is activated or deactivated by this test mode. This function does not exist on China specification machine.</p> <p>The [Counter/Stock Information] mail button becomes available on the Admin. Tab when this test mode is selected to [1] and if the machine is equipped with NET-D;G2 optional card.</p>		
	<p>Setting:</p> <p>0 : Inactive 1 : Active <default></p>		
0183	Count Charge Display Selection	Count Charge Display Selection	
	<p>Selects whether to display the [COUNT CHARGE] button on the User Mode display.</p> <p>Setting:</p> <p>0 : Inactive <default> 1 : Active</p>		<p>Selects whether to display the [COUNT CHARGE] button on the User Mode display.</p> <p>Setting:</p> <p>0 : Inactive <default> 1 : Active</p>

EZ5		EZ2 & EZ3	
0184	Count Charge Mail Transmit Date Selection	Count Charge Mail Transmit Date Selection	
	Sets the Warning display date to indicate the Count Charge information mail sending.	Sets the Warning display date to indicate the Count Charge information mail sending.	
	Range : 0 to 31 Unit : 1 = First date of each month Default : 0 : No warning display <default> If the date selected is 29, 30 or 31, if particular month does not include the selected date, the warning appears on the last date of the month.	Range : 0 to 31 Unit : 1 = First date of each month Default : 0 : No warning display <default> If the date selected is 29, 30 or 31, if particular month does not include the selected date, the warning appears on the last date of the month.	

4. Image Processing / Scanning Test Mode

EZ5		EZ2 & EZ3	
No.	Sensor & Switch Check		
0200	FB/AF HP sensor		FB/AF HP sensor
	ON: Carriage at Home position	ON: Carriage at Home position	
0201	Flatbed Original Det. Sensor		Flatbed Original Det. Sensor
	ON: Detecting original	ON: Detecting original	
0209	Stage Cover Sensor		Stage Cover Sensor
	ON: Stage cover closed	ON: Stage cover closed	
No.	Motor & Solenoid		
0260	Scanner lamp		Scanner lamp
	Switches ON/OFF scanner lamp	Switches ON/OFF scanner lamp	
No.	Unit Check		
0281	Carriage Home Action		Carriage Home Action
	Brings the carriage to the Home Position.	Brings the carriage to the Home Position.	
0284	Scanner Cycle Continuous Action		Scanner Cycle Continuous Action
	Scanner A3 size original scanning cycle movement with auto-base-control (ABC) action. HP position - Shading compensation - Auto base control action - A3 scanning -HP position. Pressing the STOP key ends the movement and returns to Home position.	Scanner A3 size original scanning cycle movement with auto-base-control (ABC) action. HP position - Shading compensation - Auto base control action - A3 scanning -HP position. Pressing the STOP key ends the movement and returns to Home position.	
0287	Scanner Lamp Replace Positioning		Scanner Lamp Replace Positioning
	Moves the lamp carriage to lamp replacing position.	Moves the lamp carriage to lamp replacing position.	
0289	Scanner SHIPPING Positioning		Scanner SHIPPING Positioning
	Moves the lamp carriage to the machine shipping position.	Moves the lamp carriage to the machine shipping position.	
No.	Data Setting		
0340	Line-Copy Slice Level Adjustment in Scanning		Line-Copy Slice Level Adjustment in Scanning
	Sets the slice level for line mode.	Sets the slice level for line mode.	
	Range : -16 to 16 (Larger values for lighter print.) Unit : 1 Default : 0	Range : -16 to 16 (Larger values for lighter print.) Unit : 1 Default : 0	
0341	Auto Base Control (ABC) Slice Level Adjustment		Auto Base Control (ABC) Slice Level Adjustment
	Sets the slice level for ABC in line mode.	Sets the slice level for ABC in line mode.	
	Range : -16 to 16 (Larger values for lighter print.) Unit : 1 Default : 0	Range : -16 to 16 (Larger values for lighter print.) Unit : 1 Default : 0	
0345	Photo/Duo Default Setting		Photo/Duo Default Setting
	Image processing selection when Photo or Duo is selected in master-making. Applies to both the master-making and printing to linked printer (RLP).	Image processing selection when Photo or Duo is selected in master-making. Applies to both the master-making and printing to linked printer (RLP).	
	Setting: 0 : Error-diffusion <default> 1 : Dot-Screen-1 2 : Dot-screen-2 3 : Dot-Screen-3 4 : Dot-Screen-4	Setting: 0 : Error-diffusion <default> 1 : Dot-Screen-1 2 : Dot-screen-2	

EZ5		EZ2 & EZ3	
0350	Halftone Curve Selection (Photo)	Halftone Curve Selection (Photo)	
	Selects the matrix forming the halftone-curve base for photo mode.	Selects the matrix forming the halftone-curve base for photo mode.	
0351	Range : 0 to 8 Unit : 1 Default : 4	Range : 0 to 8 Unit : 1 Default : 4	
	Halftone Curve Selection (Dot Photo)	Halftone Curve Selection (Dot Photo)	
0352	Selects the matrix forming the halftone-curve base for dot mode.	Selects the matrix forming the halftone-curve base for dot mode.	
	Range : 0 to 8 Unit : 1 Default : 4	Range : 0 to 8 Unit : 1 Default : 4	
0353	Halftone Curve Selection (Duo)	Halftone Curve Selection (Duo)	
	Selects the matrix forming the halftone-curve base for DotDuo mode.	Selects the matrix forming the halftone-curve base for DotDuo mode.	
0359	Range : 0 to 8 Unit : 1 Default : 4	Range : 0 to 8 Unit : 1 Default : 4	
	Halftone Curve Selection (Dot Duo)	Halftone Curve Selection (Dot Duo)	
0368	Selects the matrix forming the halftone-curve base for DotDuo mode.	Selects the matrix forming the halftone-curve base for DotDuo mode.	
	Range : 0 to 8 Unit : 1 Default : 4	Range : 0 to 8 Unit : 1 Default : 4	
0380	Trimming Slice Level Adjustment		
	Sets the slice level for the trimming.		
0381	Range : -16 to +16 (Larger values for lighter print.) Unit : 1 Default : -2		
	Carriage Idling Position Selection	Carriage Idling Position Selection	
0381	Changes the idling position of the Scanner carriage.	Changes the idling position of the Scanner carriage.	
	Setting: 0 : HP position <default> 1 : Second HP position	Setting: 0 : HP position <default> 1 : Second HP position	
0381	FB Horizontal Scanning Position Adjustment	FB Horizontal Scan Position Adjustment	
	Adjusts the original horizontal scanning position on the flatbed for FB scanning. (Different test mode exists for AF scanning.)	Adjusts the original horizontal scanning position on the flatbed for FB scanning. (Different test mode exists for AF scanning.)	
0381	Range : -30 to +30 (-3.0 mm to +3.0 mm) (+ is to the left) Unit : 5 (0.5mm) Default : 0 (0 mm)	Range : -30 to +30 (-3.0 mm to +3.0 mm) (+ is to the left) Unit : 5 (0.5mm) Default : 0 (0 mm)	
	FB Scanning Start Position Adjustment	FB Scanning Start Position Adjustment	
0381	Adjusts the original scanning start position on the flatbed (amount of top image omitted)	Adjusts the original scanning start position on the flatbed (amount of top image omitted)	
	Range : -40 to +40 (-4.0mm to +4.0mm) (+ omits more top image of the original and moves the printed image up) Unit : 1 (0.1mm) Default : 0 (0mm)	Range : -40 to +40 (-4.0mm to +4.0mm) (+ omits more top image of the original and moves the printed image up) Unit : 1 (0.1mm) Default : 0 (0mm)	

EZ5		EZ2 & EZ3	
0382	FB Scanning Speed Adjustment (Elongation & Shrinkage)	FB Scanning Speed Adjustment (Elongation & Shrinkage)	
	Adjusts the original scanning speed on the flatbed (Adjusts the speed of Read Pulse Motor)	Adjusts the original scanning speed on the flatbed (Adjust the speed of Read Pulse Motor)	
	Range : -50 to +50 (-5.0% to +5.0%) (-) shrinks the image Unit : 1 (0.1%) Default : 0 (0%)	Range : -50 to +50 (-5.0% to +5.0%) (-) shrinks the image Unit : 1 (0.1%) Default : 0 (0%)	
0386	Center black line	Center black line	
	Adds center line on the prints during master making or printout from linked printer. (The center line is added only when the original is scanned on the Flat Bed.) The setting returns back to the default when machine power is turned OFF.	Adds center line on the prints during master making or printout from linked printer. (The center line is added only when the original is scanned on the Flat Bed.) The setting returns back to the default when machine power is turned OFF.	
	Setting : 0 : No center line <default> 1 : Adds center line	Setting : 0 : No center line <default> 1 : Adds center line	
0399	Edge Emphasis Threshold Offset		
	Sets the offset for the edge emphasis.		
	Range : -128 to 127 Unit : 1 Default : 0		

5. Master Making / Master Disposal Test Mode

EZ5			EZ2 & EZ3		
No.	Sensor & Switch Check				
0400	Master positioning sensor		Master positioning sensor		
		ON: Master detected		ON: Master detected	
0401	Master detection sensor		Master detection sensor		
		ON: Master detected		ON: Master detected	
0402	Master end sensor		Master end sensor		
		ON: Master end seal detected		ON: Master end seal detected	
0403			Cutter HP SW [Shuttle blade cutter]		
				ON: SW pressed (Cutter at HP)	
	Cutter HP SW [Rotary cutter]		Cutter HP SW [Rotary cutter]		
		ON: SW not pressed (Cutter at HP)		ON: SW not pressed (Cutter at HP)	
0404			Cutter Stop Position SW [Shuttle blade cutter]		
				ON: SW pressed (Cutter at end position)	
0406	TPH Pressure Sensor		TPH Pressure Sensor		
		ON: Sensor light blocked (TPH down position)		ON: Sensor light blocked (TPH down position)	
0407	Master Making Unit Top Cover Safety Switch		Master Making Unit Top Cover Safety Switch		
		ON: Switch pressed (cover closed)		ON: Switch pressed (cover closed)	
0408	Master Making Unit Lock Sensor		Master Making Unit Lock Sensor		
		ON: Sensor light blocked (Master-making unit locked in position).		ON: Sensor light blocked (Master-making unit locked in position).	
0409	Master Making Unit Safety Switch		Master Making Unit Safety Switch		
		ON: SW pressed (Master making unit is set in position). Other safety switches must be ON for this check.		ON: SW pressed (Master making unit is set in position). Other safety switches must be ON for this check.	
0410	Master-making-unit releasing button		Master-making-unit releasing button		
		ON: Button is pressed		ON: Button is pressed	
0420	Master Removal Sensor		Master Removal Sensor		
		ON: Sensor light is not blocked (Master is jammed).		ON: Sensor light is not blocked (Master is jammed).	
0421	Master Compression HP Sensor		Master Compression HP Sensor		
		ON: Sensor light blocked (Master compression plate at HP)		ON: Sensor light blocked (Master compression plate at HP)	
0423	Master Disposal BOX Safety Switch		Master Disposal BOX Safety Switch		
		ON: Master disposal box is set in place Other safety switches must be ON for this check.		ON: Master disposal box is set in place Other safety switches must be ON for this check.	
0424	Master Disposal Box Set Sensor		Master Disposal Box Set Sensor		
		ON: Sensor light blocked (Master disposal box is set in place.)		ON: Sensor light blocked (Master disposal box is set in place.)	
0425	Master Compression Motor FG Sensor		Master Compression Motor FG Sensor		
		ON: Sensor light blocked (Encoder disc is detected)		ON: Sensor light blocked (Encoder disc is detected)	
0426	Master Removal Motor FG Sensor		Master Removal Motor FG Sensor		
		ON: Sensor light blocked (Encoder disc is detected)		ON: Sensor light blocked (Encoder disc is detected)	
No.	Motor & Solenoid				
0460	Thermal Pressure Motor (CW)		Thermal-pressure motor (CW)		
		Rotates in clock-wise (CW) direction		Rotates in clock-wise (CW) direction	
0461	Thermal Pressure Motor (CCW)		Thermal Pressure Motor (CCW)		
		Rotates in counter-clock-wise (CCW) direction		Rotates in counter-clock-wise (CCW) direction	

EZ5		EZ2 & EZ3	
0462	Write Pulse Motor in feed direction	Write Pulse Motor in feed direction	
	Rotates in master feeding direction. (CW direction)		Rotates in master feeding direction (CW direction)
0463	Write Pulse Motor in return direction	Write Pulse Motor in return direction	
	Rotates in master returning direction. (CCW direction)		Rotates in master returning direction. (CCW direction)
0464	Load Pulse Motor in feed direction	Load Pulse Motor in feed direction	
	Rotates in master feeding direction. (CW direction)		Rotates in master feeding direction. (CW direction)
0466	Write pulse motor + Load pulse motor in feed direction	Write pulse motor + Load pulse motor in feed direction	
	Rotates both the Write & Load pulse motors in master feed direction		Rotates both the Write & Load pulse motors in master feed direction
0467	Master Making Unit Release Button LED	Master Making Unit Release Button LED	
	LED illuminates.		LED illuminates.
0470	Master Remove Motor in feed direction	Master Remove Motor in feed direction	
	Rotates in the direction to feed the removed master towards the master disposal box. (CW direction)		Rotates in the direction to feed the removed master towards the master disposal box. (CW direction)
No.	Unit Check		
0480	Cutter Motor 1 cycle motion	Cutter motor 1 cycle motion	
	Performs one cutting motion.		Performs one cutting motion.
0481	Thermal Pressure Motor action (TPH down)	Thermal Pressure Motor action (TPH down)	
	Pushes the TPH down.		Pushes the TPH down.
0482	Thermal Pressure Motor action (TPH up)	Thermal pressure motor action (TPH up)	
	Pushes the TPH up		Pushes the TPH up
0488	Master Making Unit Lock Solenoid ON/OFF action	Master Making Unit Lock Solenoid ON/OFF action	
	Press START key to switch ON the Solenoid. Solenoid automatically switches OFF 10 sec. later.		Press START key to switch ON the Solenoid. Solenoid automatically switches OFF 10 sec. later.
0490	Master Compression Plate home positioning	Master Compression Plate home positioning	
	Moves master compression plate to the home position.		Moves master compression plate to the home position.
0491	Master Compression Plate Protect Position		
	Moves master compression plate to the Protection Mode position.		
0493	Master Compression Plate Continuous Movement	Master Compression Plate Continuous Movement	
	Repeats disposal compression action with interval of 3 seconds between the each.		Repeats disposal compression action with interval of 3 seconds between the each.
0494	Cutter motor ON action (cut direction)	Cutter motor ON action (cut direction)	
	Rotates the cutter motor in the cut direction (maximum 10 seconds) Caution: This test mode is to check the IC driver. Disconnect the connector to the Cutter motor before the activation. Otherwise the machine will be damaged.		Rotates the cutter motor in the cut direction (maximum 10 seconds) Caution: This test mode is to check the IC driver. Disconnect the connector to the Cutter motor before the activation. Otherwise the machine will be damaged.
No.	Data Clearing		
0510	Master removal software count clear	Master removal software count clear	
	Initializes the master removal software count to 0.		Initializes the master removal software count to 0.
No.	Data Check		
0521	TPH thermistor temperature data	TPH thermistor temperature data	
	Displays the temperature of the TPH thermistor in degrees Celsius.		Displays the temperature of the TPH thermistor in degrees Celsius.

EZ5		EZ2 & EZ3	
0524	TPH power voltage	TPH power voltage	
	Displays the voltage applied to the TPH when the power to the TPH is switched ON. Divide the displayed number by 100 (1000 = 10V).	Displays the voltage applied to the TPH when the power to the TPH is switched ON. Divide the displayed number by 100 (1000 = 10V).	
0527	Master usage start date	Master usage start date	
	Displays master use start date stored in Master TAG. For example, 2007/12/28 will be displayed as 2007 and 1228 alternately.	Displays master use start date stored in Master TAG. For example, 2007/12/28 will be displayed as 2007 and 1228 alternately.	
0528	Master removal software count display	Master removal software count display	
	Displays the master removal software count.	Displays the master removal software count.	
No.	Data Setting		
0540	Master Leading-Edge Position Adjustment	Master Leading-Edge Position Adjustment	
	Adjusts return movement of the master after the master cutting action, so the Master positioning sensor is OFF when the master set action is completed. Range : 0 to 100 (0 mm to +10.0 mm) (+) returns the master material further back. Unit : 1 (0.1 mm) Default : 50 (5.0 mm)	Adjusts return movement of the master after the master cutting action, so the Master positioning sensor is OFF when the master set action is completed. Range : 0 to 100 (0 mm to +10.0 mm) (+) returns the master material further back. Unit : 1 (0.1 mm) Default : 50 (5.0 mm)	
0541	Write start-position adjustment	Write start-position adjustment	
	Adjusts the master-making start position on the master material by changing the amount of rotation in CW or CCW direction the write-pulse-motor makes before the write-signal goes on. Range : -50 to +50 (-5.0 mm to +5.0 mm) (+ values return the master material back more before the write signal goes on. The master-making starts from closer to the leading edge of the master material. As a result, the printed image position on the paper comes up.) Unit : 1 (0.1 mm) Default : -15 (-1.5 mm)	Adjusts the master-making start position on the master material by changing the amount of rotation in CW or CCW direction the write-pulse-motor makes before the write-signal goes on. Range : -50 to +50 (-5.0 mm to +5.0 mm) (+ values return the master material back more before the write signal goes on. The master-making starts from closer to the leading edge of the master material. As a result, the printed image position on the paper comes up.) Unit : 1 (0.1 mm) Default : EZ3 = -15 (-1.5mm) EZ2 = 0 (0mm)	
0542	Master-making length adjustment	Master-making length adjustment	
	Adjusts the master-making area length. Range : -100 to +100 (-10.0 mm to +10.0 mm) (+ values increase master-making area length) Unit : 1 (0.1 mm) Default : 0 (0 mm)	Adjusts the master-making area length. Range : -100 to +100 (-10.0 mm to +10.0 mm) (+ values increase master-making area length) Unit : 1 (0.1 mm) Default : 0 (0 mm)	

EZ5		EZ2 & EZ3	
0543	Master-clamp-amount adjustment	Master-clamp-amount adjustment	
	Adjusts the master-clamp amount under the clamp plate during master loading onto the drum. This adjustment affects the write-start position. Range : -100 to +100 (-10.0 mm to +10.0 mm) (+ values increase clamping amount) Unit : 1 (0.1 mm) Default : 0 (0 mm)	Adjusts the master-clamp amount under the clamp plate during master loading onto the drum. This adjustment affects the write-start position. Range : -100 to +100 (-10.0 mm to +10.0 mm) (+ values increase clamping amount) Unit : 1 (0.1 mm) Default : 0 (0 mm)	
0544	Master cut length adjustment	Master cut length adjustment	
	Adjusts the total length of one master (changes the master cut timing against the drum angle). 1 degree = approximately 1.5 mm Range : -100 to +100 (-10.0 degrees to +10.0 degrees) (+ values increase the master length). Unit : 5 (0.5 degrees) Default : -10 (-1 degrees)	Adjusts the total length of one master (changes the master cut timing against the drum angle). 1 degree = approximately 1.5 mm Range : -100 to +100 (-10.0 degrees to +10.0 degrees) (+ values increase the master length). Unit : 5 (0.5 degrees) Default : -10 (-1 degrees)	
0545	TPH heat energy adjustment	TPH heat energy adjustment	
	Adjusts the TPH heat energy. Range : 0 to 8 Unit : 1 Default : 2	Adjusts the TPH heat energy. Range : 0 to 8 Unit : 1 Default : 2	
0547	Master-making speed adjustment (Elongation & Shrinkage)	Master-making speed adjustment (Elongation & Shrinkage)	
	Image elongation and shrinkage in making master. (Adjusts the speed of the write pulse motor.) Range : -100 to +100 (-10.0% to +10.0%) (+) elongates the image in master making. Unit : 1 (0.1%) Default : 0 (0%)	Image elongation and shrinkage in making master. (Adjusts the speed of the write pulse motor.) Range : -100 to +100 (-10.0% to +10.0%) (+) elongates the image in master making. Unit : 1 (0.1%) Default : EZ3 = 0 (0%) EZ2 = -6 (-0.6%)	
0548	Write Roller diameter compensation		
	Compensates the Write roller diameter differences between one Write roller to the other. Range : 2305 to 2315 (23.05 mm to 23.15 mm) Unit : 1 (0.01 mm) Default : 2310 (23.10 mm)		
0570	Master Removal Roller stop timing	Master Removal Roller stop timing	
	Sets the timing for the Master removal rollers to stop in relation to the Print drum angle. Range: -50 to +50 (-50 to +50 degrees) Unit: 1 (1 degree) Default: 0 (0 degree)	Sets the timing for the Master removal rollers to stop in relation to the Print drum angle. Range: -50 to +50 (-50 to +50 degrees) Unit: 1 (1 degree) Default: 0 (0 degree)	
0571	Master Removal Roller stop timing (A4-wide Print drum)		
	Sets the timing for the Master removal rollers to stop inn relation to A4W Drum angle. Range: -50 to +50 (-50 to +50 degrees) Unit: 1 (1 degree) Default: 0 (0 degree)		

EZ5		EZ2 & EZ3	
0572	Compulsory set action of Master disposal box	Compulsory set action of Master disposal box	
	<p>Selects whether to activate or deactivate the compulsory set action of Master disposal box after machine power ON, machine wake-up or when Master disposal box is inserted in the machine.</p> <p>This test mode is not selectable from the Test Mode menu.</p> <p>Setting : 0 : Not active <default> 1 : Active</p>	<p>Selects whether to activate or deactivate the compulsory set action of Master disposal box after machine power ON, machine wake-up or when Master disposal box is inserted in the machine.</p> <p>This test mode is not selectable from the Test Mode menu.</p> <p>Setting : 0 : Not active <default> 1 : Active</p>	
0573	Master compression-limit position (maximum end position).	Master compression-limit position (maximum end position).	
	<p>Sets the pulse count for the compression-limit position (maximum end position).</p> <p>Range : 106 to 163 (106 to 163 pulses) (Master compression plate 65 to 100 degrees from home position).</p> <p>Unit : 1 (1 pulse) Default : 147 pulses (Master compression plate angle 90 degrees from home position)</p>	<p>Sets the pulse count for the compression-limit position (maximum end position).</p> <p>Range : 106 to 163 (106 to 163 pulses) (Master compression plate 65 to 100 degrees from home position).</p> <p>Unit : 1 (1 pulse) Default : 147 pulses (Master compression plate angle 90 degrees from home position)</p>	
0575	Master compression duration adjustment	Master compression duration adjustment	
	<p>Sets the stop time duration for one master compression. (The compressing action is stopped when the time for the encoder disc to make one rotation exceeds the set time.)</p> <p>Range : 500 to 7000 (5 msec to 70 msec) Unit : 25 (0.25 msec) Default : 4000 (40 msec)</p>	<p>Sets the stop time duration for one master compression. (The compressing action is stopped when the time for the encoder disc to make one rotation exceeds the set time.)</p> <p>Range : 500 to 7000 (5 msec to 70 msec) Unit : 25 (0.25 msec) Default : 4000 (40 msec)</p>	
0576	Master disposal box full detection position adjustment	Master disposal box full detection position adjustment	
	<p>Sets the pulse count for master disposal box full detection position.</p> <p>Range : 80 to 162 (80 pulse to 162 pulse) Unit : 1 (1 pulse) Default : 80 (49 degrees) for A3 & Ledger 146 (90 degrees) for B4 & Legal 146 (90 degrees) for A4 & Letter</p>	<p>Sets the pulse count for master disposal box full detection position.</p> <p>Range : 80 to 162 (80 pulse to 162 pulse) Unit : 1 (1 pulse) Default : 80 (49 degrees) for A3 & Ledger 146 (90 degrees) for B4 & Legal 146 (90 degrees) for A4 & Letter</p>	
0577	Master compression protect position adjustment		
	<p>Selects the position of the master compression plate in Protection Mode.</p> <p>Range : -30 to +30 (-30 to +30 pulses) Unit : 5 pulses Default : 0 pulse</p>		

EZ5		EZ2 & EZ3	
0578	Master removal motor speed selection	Master removal motor speed selection	
	Selects the Master removal motor speed in relation to the print drum rotation speed.	Selects the Master removal motor speed in relation to the print drum rotation speed.	
0579	Setting: 0 : 10% slower than the Print drum speed. 1 : Same speed as the Print drum. 2 : 5% faster than the Print drum speed. 3 : 10% faster than the Print drum speed.<default> 4 : 20% faster than the Print drum speed. 5 : 30% faster than the Print drum speed.	Setting: 0 : 10% slower than the Print drum speed. 1 : Same speed as the Print drum. 2 : 5% faster than the Print drum speed. 3 : 10% faster than the Print drum speed.<default> 4 : 20% faster than the Print drum speed. 5 : 30% faster than the Print drum speed.	
	Compressing stop default position self-adjustment selection	Compressing stop default position self-adjustment selection	
0584	Enables/disables automatic adjustment to correct the default value of the compressing stop position.	Enables/disables automatic adjustment to correct the default value of the compressing stop position.	
	Setting: 0 : Disable 1 : Enable <default>	Setting: 0 : Disable 1 : Enable <default>	
0585	Master removal FULL software count selection	Master removal FULL software count selection	
	Sets the software FULL count for the master removal when the FULL detection by the software count is selected	Sets the software FULL count for the master removal when the FULL detection by the software count is selected	
0585	Range : 50 to 100 (50 to 100 masters) Unit : 10 (10 masters) Default : 100 (100 masters)	Range : 50 to 100 (50 to 100 masters) Unit : 10 (10 masters) Default : 100 (100 masters)	
	Master removal software count Disable/Enable selection	Master removal software count Disable/Enable selection	
0585	Selection to Enable (use the software count) or Disable (use the conventional FG sensor and Master compression plate timing) the Master removal software count system.	Selection to Enable (use the software count) or Disable (use the conventional FG sensor and Master compression plate timing) the Master removal software count system.	
	Setting: 0 : Disable 1 : Enable <default>	Setting: 0 : Disable 1 : Enable <default>	

6. Paper Feeding / Paper Ejection Test mode

EZ5		EZ2 & EZ3	
No.	Sensor & Switch Check		
0600	Paper detection sensor	Paper detection sensor	
	ON: Sensor light reflected (paper detected)	Sensor light reflected (paper detected)	
0601	Paper size detection sensor	Paper size detection sensor	
	ON: Sensor light reflected (paper detected)	ON: Sensor light reflected (paper detected)	
0602	Elevator upper limit sensor A	Elevator upper-limit sensor A	
	ON: Sensor light blocked	ON: Sensor light blocked	
0603	Elevator upper limit sensor B	Elevator upper-limit sensor B	
	ON: Sensor light blocked	ON: Sensor light blocked	
0604	Elevator lower limit sensor	Elevator lower-limit sensor	
	ON: Sensor light blocked (Sensor detecting paper feed tray at maximum down position)	ON: Sensor light blocked (Sensor detecting paper feed tray at maximum down position)	
0605	Paper sensor	Paper sensor	
	ON: Sensor light reflected (paper detected)	ON: Sensor light reflected (paper detected)	
0606	Paper ejection sensor	Paper ejection sensor	
	ON: Sensor light reflected (paper detected)	ON: Sensor light reflected (paper detected)	
0607	Paper feed tray upper safety switch	Paper feed tray upper safety switch	
	ON: Safety switch not triggered	ON: Safety switch not triggered	
0608	Paper feed tray lower safety SW	Paper feed tray lower safety SW	
	ON: Safety switch not triggered	ON: Safety switch not triggered	
0609	Paper feed tray button	Paper feed tray button	
	ON: Button (switch) is pressed	ON: Button (switch) is pressed	
0612	Paper ejection FG sensor	Paper ejection FG sensor	
	ON: Sensor light blocked (detecting encoder disc)	ON: Sensor light blocked (detecting encoder disc)	
0613	Card feeder (OPTION) attachment detection	Card feeder (OPTION) attachment detection	
	ON: Card feeder exists	ON: Card feeder exists	
0614	Paper feed pressure sensor	Paper feed pressure sensor	
	ON: Paper feed pressure lever is at CARD.	ON: Paper feed pressure lever is at CARD.	
0618	Paper ejection wing HP sensor		
	ON: Sensor light blocked (blocked by shield plate)		
No.	Motor & Solenoid		
0660	Paper ejection motor	Paper ejection motor	
	Rotates the motor	Rotates the motor	
0661	Suction fan	Suction fan	
	Activates the fan	Activates the fan	
0662	Separation fan	Separation fan	
	Activates the fan	Activates the fan	
0666	Paper ejection wing pulse motor (CW)		
	Rotates the pulse motor in clockwise direction		
0667	Paper ejection wing pulse motor (CCW)		
	Rotates the pulse motor in counter-clockwise direction		
No.	Unit Check		
0680	Paper ejection area Fan check		
	Turns ON the Separation Fan and Suction Fan at same time.		
0681	Paper feed tray maximum up positioning	Paper feed tray maximum up positioning	
	Raises the paper feed tray to the maximum up position.	Raises the paper feed tray to the maximum up position.	
0682	Paper feed tray elevation up & down	Paper feed tray elevation up & down	
	Raises and lowers the paper-feed tray repeatedly	Raises and lowers the paper-feed tray repeatedly	
0683	Paper feed tray maximum down positioning	Paper feed tray maximum down positioning	
	Lowers the paper feed tray to the maximum down position.	Lowers the paper feed tray to the maximum down position.	

EZ5			EZ2 & EZ3		
0687	Paper feed reverse-rotation prevention solenoid ON/OFF action		Paper feed reverse-rotation prevention solenoid ON/OFF action		
		Turns the solenoid ON when the Start key is pressed. The solenoid automatically switches OFF after 10 seconds.		Turns the solenoid ON when the Start key is pressed. The solenoid automatically switches OFF after 10 seconds.	
0688	Paper feed clutch ON/OFF action		Paper feed clutch ON/OFF action		
		Presses START key to turn ON the clutch. The clutch automatically switches off after 10 seconds.		Presses START key to turn ON the clutch. The clutch automatically switches off after 10 seconds.	
0703	Paper ejection wing HP positioning				
		Positions the paper ejection wing to the home position.			
0704	Paper ejection wing fixed position				
		Fixes the paper wing position to the position selected by test mode No. 0780.			
0705	Paper sensor automatic adjustment		Paper sensor automatic adjustment		
		One sheet of clean white paper must be set between the paper sensor during this procedure.		One sheet of clean white paper must be set between the paper sensor during this procedure.	
0708	Elevator motor ON action		Elevator motor ON action		
		Rotates the Elevator motor in the elevating direction (maximum 10 seconds) Caution: This test mode is to check the IC driver. Disconnect the connector to the Elevator motor before the activation. Otherwise the machine will be damaged.		Rotates the Elevator motor in the elevating direction (maximum 10 seconds) Caution: This test mode is to check the IC driver. Disconnect the connector to the Elevator motor before the activation. Otherwise the machine will be damaged.	
No.	Data Check				
0721	Paper width display (mm)		Paper width display (mm)		
		Displays the potentiometer adjustment result in millimeter value to the first decimal.		Displays the potentiometer adjustment result in millimeter value to the first decimal.	
0722	Paper sensor A/D value display		Paper sensor A/D value display		
		Displays the A/D value of the Paper sensor.		Displays the A/D value of the Paper sensor.	
No.	Data Setting				
0740	Elevator upper-limit position selection.		Elevator upper-limit position selection.		
		Selects the paper-feed-tray upper-limit position. If 0 (Auto) is selected, the upper limit position is linked to the paper feed pressure lever position. If 1, 2 or 3 is selected, the upper limit stop position is fixed.		[Not available on EZ2] Selects the paper-feed-tray upper-limit position. If 0 (Auto) is selected, the upper limit position is linked to the paper feed pressure lever position. If 1, 2 or 3 is selected, the upper limit stop position is fixed.	
	Setting: 0 : Auto - Linked to the Pressure adjust lever <default> 1 : Standard paper position 2 : Card paper position 3 : Custom paper position			Setting: 0 : Auto - Linked to the Pressure adjust lever <default> 1 : Standard paper position 2 : Card paper position 3 : Custom paper position	

EZ5		EZ2 & EZ3	
0741	Paper feed clutch ON angle (NORMAL)	Paper feed clutch ON angle (NORMAL)	
	Adjusts the drum angle timing for activating the Paper feed clutch. This test mode applies only when the Paper feed pressure lever is set to <Normal>.	Adjusts the drum angle timing for activating the Paper feed clutch. This test mode applies only when the Paper feed pressure lever is set to <Normal>.	
0742	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay clutch ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay clutch ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	
	Paper feed clutch OFF angle (NORMAL)	Paper feed clutch OFF angle (NORMAL)	
0743	Adjusts the drum angle timing for deactivating the Paper feed clutch. This test mode applies only when the Paper feed pressure lever is set to <Normal>.	Adjusts the drum angle timing for deactivating the Paper feed clutch. This test mode applies only when the Paper feed pressure lever is set to <Normal>.	
	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay clutch OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay clutch OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	
0744	Paper feed retries after one paper feed action on 1st paper feed area.	Paper feed retries after one paper feed action on 1st paper feed area.	
	Sets the number of times the first paper feeding is tried when no paper feed occurs.	Sets the number of times the first paper feeding is tried when no paper feed occurs.	
0745	Setting: 1 : No paper feed retry action. <default> (The machine displays paper feed jam on the first paper feed try.) 2 : One more paper feed action. (Paper jam display if no paper feeds after second paper feed try.) 3 : Two more tries. (Paper jam display if no paper feed after third paper feed try.)	Setting: 1 : No paper feed retry action. <default> (The machine displays paper feed jam on the first paper feed try.) 2 : One more paper feed action. (Paper jam display if no paper feeds after second paper feed try.) 3 : Two more tries. (Paper jam display if no paper feed after third paper feed try.)	
	Paper Feed Clutch OFF Angle (CARD)	Paper Feed Clutch OFF Angle (CARD)	
0746	Adjusts the drum angle timing for deactivating the Paper feed clutch. This test mode applies only when the Paper feed pressure lever is set to <Card>.	Adjusts the drum angle timing for deactivating the Paper feed clutch. This test mode applies only when the Paper feed pressure lever is set to <Card>.	
	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay clutch OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay clutch OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	
0747	Paper feed clutch ON angle (CARD)	Paper feed clutch ON angle (CARD)	
	Adjusts the drum angle timing for activating the Paper feed clutch. This test mode applies only when the Paper feed pressure lever is set to <Card>.	Adjusts the drum angle timing for activating the Paper feed clutch. This test mode applies only when the Paper feed pressure lever is set to <Card>.	
0748	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay clutch ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay clutch ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	

EZ5		EZ2 & EZ3	
0748	Scraper clutch OFF angle (Optional card feeder)	Scraper clutch OFF angle (Optional card feeder)	
	Adjusts the drum angle timing for deactivating the Scraper clutch. This test mode applies only when the Optional card feeder is attached.	Adjusts the drum angle timing for deactivating the Scraper clutch. This test mode applies only when the Optional card feeder is attached.	
0750	Range : -100 to +100 (-10.0 to +10.0 degrees) (+ values delay clutch OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	Range : -100 to +100 (-10.0 to +10.0 degrees) (+ values delay clutch OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	
	Paper feed reverse-rotation prevention solenoid Activate/Deactivate selection (Optional card feeder)	Paper feed reverse-rotation prevention solenoid Activate/Deactivate selection (Optional card feeder)	
0751	Activates or Deactivates the Paper feed reverse-rotation prevention solenoid. This test mode applies only when the Optional card feeder is attached.	Activates or Deactivates the Paper feed reverse-rotation prevention solenoid. This test mode applies only when the Optional card feeder is attached.	
	Setting: 0 : Deactivate 1 : Activate <default> (Activates when the Paper feed pressure lever is selected to CARD.)	Setting: 0 : Deactivate 1 : Activate <default> (Activates when the Paper feed pressure lever is selected to CARD.)	
0752	Paper feed jam detection angle. (Paper IN)	Paper feed jam detection angle. (Paper IN)	
	Adjusts the drum angle timing for detecting the paper feed jam by paper sensor. (Paper IN)	Adjusts the drum angle timing for detecting the paper feed jam by paper sensor. (Paper IN)	
0753	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay detection timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay detection timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	
	Paper feed jam detection angle. (Paper OUT)	Paper feed jam detection angle. (Paper OUT)	
0754	Adjusts the drum angle timing for detecting the paper feed jam by paper sensor. (Paper OUT)	Adjusts the drum angle timing for detecting the paper feed jam by paper sensor. (Paper OUT)	
	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay detection timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay detection timing) Unit : 5 (0.5 degrees) Default : 0 (0 degree)	
0755	Paper receiving jam detection angle. (Paper IN)	Paper receiving jam detection angle. (Paper IN)	
	Adjusts the drum angle timing for detecting paper receiving jam by Paper ejection sensor. (Paper IN)	Adjusts the drum angle timing for detecting paper receiving jam by Paper ejection sensor. (Paper IN)	
0756	Range : -500 to +500 (-50.0 to +50.0 degrees) (+ values delay detection timing) Unit : 5 (0.5°) Default : 0 (0°)	Range : -500 to +500 (-50.0 to +50.0 degrees) (+ values delay detection timing) Unit : 5 (0.5°) Default : 0 (0°)	

EZ5		EZ2 & EZ3	
0754	Paper receiving jam detection angle. (Paper OUT)	Paper receiving jam detection angle. (Paper OUT)	
	Adjusts the drum angle timing for detecting paper receiving jam by Paper ejection sensor. (Paper OUT)	Adjusts the drum angle timing for detecting paper receiving jam by Paper ejection sensor. (Paper OUT)	
0755	Range : -500 to +500 (-50.0 to +50.0 degrees) (+ values delay detection timing) Unit : 5 (0.5°) Default : 0 (0°)	Range : -500 to +500 (-50.0 to +50.0 degrees) (+ values delay detection timing) Unit : 5 (0.5°) Default : 0 (0°)	
0756	Paper ejection motor speed adjustment (Proof-Print)	Paper ejection motor speed adjustment (Proof-Print)	
	Adjusts the speed of the suction belt in relation to the Print drum speed in Proof Print printing.	Adjusts the speed of the suction belt in relation to the print drum speed.	
0757	Setting: 0 : 3.0 times the drum speed. 1 : 3.4 times the drum speed. <default> 2 : 3.7 times the drum speed. 3 : 4.0 times the drum speed. 4: 4.5 times the drum speed.	Setting: 0 : 3.0 times the drum speed. 1 : 3.4 times the drum speed. <default> 2 : 3.7 times the drum speed. 3 : 4.0 times the drum speed. 4: 4.5 times the drum speed.	
0758	Paper ejection motor speed adjustment (Print speed No.1)	Paper ejection motor speed adjustment (Print speed No.1)	
	Adjusts the speed of the suction belt in relation to the Print drum speed of 60 rpm.	Adjusts the speed of the suction belt in relation to the Print drum speed of 60 rpm.	
0759	Setting: 0 : 1.5 times the drum speed. 1 : 1.7 times the drum speed. <default> 2 : 1.8 times the drum speed. 3 : 1.9 times the drum speed. 4: 2.0 times the drum speed.	Setting: 0 : 1.5 times the drum speed. 1 : 1.7 times the drum speed. <default> 2 : 1.8 times the drum speed. 3 : 1.9 times the drum speed. 4: 2.0 times the drum speed.	
0760	Paper ejection motor speed adjustment (Print speed No.2)	Paper ejection motor speed adjustment (Print speed No.2)	
	Adjusts the speed of the suction belt in relation to the Print drum speed of 80 rpm.	Adjusts the speed of the suction belt in relation to the Print drum speed of 80 rpm.	
0761	Setting: 0 : 1.3 times the drum speed. 1 : 1.5 times the drum speed. <default> 2 : 1.6 times the drum speed. 3 : 1.7 times the drum speed. 4: 1.8 times the drum speed.	Setting: 0 : 1.3 times the drum speed. 1 : 1.5 times the drum speed. <default> 2 : 1.6 times the drum speed. 3 : 1.7 times the drum speed. 4: 1.8 times the drum speed.	
0762	Paper ejection motor speed adjustment (Print speed No.3)	Paper ejection motor speed adjustment (Print speed No.3)	
	Adjusts the speed of the suction belt in relation to the Print drum speed of 100 rpm.	Adjusts the speed of the suction belt in relation to the Print drum speed of 100 rpm.	
0763	Setting: 0 : 1.1 times the drum speed. 1 : 1.3 times the drum speed. 2 : 1.4 times the drum speed. 3 : 1.5 times the drum speed. <default> 4: 1.6 times the drum speed.	Setting: 0 : 1.1 times the drum speed. 1 : 1.3 times the drum speed. <default> 2 : 1.4 times the drum speed. 3 : 1.5 times the drum speed. 4: 1.6 times the drum speed.	

EZ5		EZ2 & EZ3	
0759	Paper ejection motor speed adjustment (Print speed No.4)	Paper ejection motor speed adjustment (Print speed No.4)	
	Adjusts the speed of the suction belt in relation to the Print drum speed of 120 rpm.	Adjusts the speed of the suction belt in relation to the Print drum speed of 120 rpm.	
	Setting: 0 : 1.0 times the drum speed. 1 : 1.1 times the drum speed. <default> 2 : 1.2 times the drum speed. 3 : 1.3 times the drum speed. 4 : 1.4 times the drum speed.	Setting: 0 : 1.0 times the drum speed. 1 : 1.1 times the drum speed. <default> 2 : 1.2 times the drum speed. 3 : 1.3 times the drum speed. 4 : 1.4 times the drum speed.	
0760	Paper ejection motor speed adjustment (Print speed No.5)	Paper ejection motor speed adjustment (Print speed No.5)	
	Adjusts the speed of the suction belt in relation to the Print drum speed of 130 rpm.	Adjusts the speed of the suction belt in relation to the Print drum speed of 130 rpm.	
	Setting: 0 : 1.0 times the drum speed. 1 : 1.1 times the drum speed. 2 : 1.2 times the drum speed. <default> 3 : 1.3 times the drum speed. 4 : 1.4 times the drum speed.	Setting: 0 : 1.0 times the drum speed. 1 : 1.1 times the drum speed. 2 : 1.2 times the drum speed. <default> 3 : 1.3 times the drum speed. 4 : 1.4 times the drum speed.	
0761		Paper feed clutch ON angle (Paper type 1)	
		Adjusts the drum angle timing for the Paper feed clutch ON. (For user-mode paper type 1) This value is added to the adjustment value of Test Mode No.741.	
		Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	
0762		Paper feed clutch OFF angle (Paper type 1)	
		Adjusts the drum angle timing for the Paper feed clutch OFF. (For user-mode paper type 1) This value is added to the adjustment value of Test Mode No.742.	
		Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	
0763		[Not available on EZ2]	
		Elevator upper limit position selection (Paper type 1)	
		Selects the Paper feed tray upper limit position. (For user-mode paper type 1)	
0763		Setting: 0: High (paper feed pressure is higher) 1: Middle (paper feed pressure is middle) <default> 2: Low (paper feed pressure is lower)	

EZ5		EZ2 & EZ3	
0764		Paper feed clutch ON angle (Paper type 2)	
			Adjusts the drum angle timing for the Paper feed clutch ON. (For user-mode paper type 2) This value is added to the adjustment value of Test Mode No.741.
			Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)
0765		Paper feed clutch OFF angle (Paper type 2)	
			Adjusts the drum angle timing for the Paper feed clutch OFF. (For user-mode paper type 2) This value is added to the adjustment value of Test Mode No.742.
			Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)
0766		[Not available on EZ2]	
		Elevator upper limit position selection (Paper type 2)	
			Selects the Paper feed tray upper limit position. (For user-mode paper type 2) Setting: 0 : High (paper feed pressure is higher) 1 : Middle (paper feed pressure is middle) <default> 2 : Low (paper feed pressure is lower)
0767		Paper feed clutch ON angle (Paper type 3)	
			Adjusts the drum angle timing for the Paper feed clutch ON. (For user-mode paper type 3) This value is added to the adjustment value of Test Mode No.741.
			Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)
0768		Paper feed clutch OFF angle (Paper type 3)	
			Adjusts the drum angle timing for the Paper feed clutch OFF. (For user-mode paper type 3) This value is added to the adjustment value of Test Mode No.742.
			Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)

EZ5		EZ2 & EZ3	
0769		[Not available on EZ2]	
		Elevator upper limit position selection (Paper type 3)	
			Selects the Paper feed tray upper limit position. (For user-mode paper type 3)
0770		Setting: 0 : High (paper feed pressure is higher) 1 : Middle (paper feed pressure is middle) <default> 2 : Low (paper feed pressure is lower)	
		Paper feed clutch ON angle (Paper type 4)	
			Adjusts the drum angle timing for the Paper feed clutch ON. (For user-mode paper type 4) This value is added to the adjustment value of Test Mode No.741.
0771		Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	
		Paper feed clutch OFF angle (Paper type 4)	
			Adjusts the drum angle timing for the Paper feed clutch OFF. (For user-mode paper type 4) This value is added to the adjustment value of Test Mode No.742.
0772		Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	
		[Not available on EZ2]	
		Elevator upper limit position selection (Paper type 4)	
0773			Selects the Paper feed tray upper limit position. (For user-mode paper type 4)
		Setting: 0 : High (paper feed pressure is higher) 1 : Middle (paper feed pressure is middle) <default> 2 : Low (paper feed pressure is lower)	
		Paper feed clutch ON angle (Paper type 5)	
0773			Adjusts the drum angle timing for the Paper feed clutch ON. (For user-mode paper type 5) This value is added to the adjustment value of Test Mode No.741.
		Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay ON timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	

EZ5			EZ2 & EZ3	
0774			Paper feed clutch OFF angle (Paper type 5)	
				Adjusts the drum angle timing for the Paper feed clutch OFF. (For user-mode paper type 5) This value is added to the adjustment value of Test Mode No.742.
				Range : -200 to +200 (-20.0 to +20.0 degrees) (+ values delay OFF timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)
0775			[Not available on EZ2]	
			Elevator upper limit position selection (Paper type 5)	
				Selects the Paper feed tray upper limit position. (For user-mode paper type 5) Setting: 0 : High (paper feed pressure is higher) 1 : Middle (paper feed pressure is middle) <default> 2 : Low (paper feed pressure is lower)
0779	Paper ejection wing position compensation			
		Compensates the amount of the Paper ejection wing movement.		
		Range : -20 to +20 (-20 pulses to +20 pulses) Unit : 1 (1 pulse) Default : 0 (0 pulses)		
0780	Paper ejection wing fixed-position selection			
		Fixes the paper-ejection wing position when custom position is selected by the operator. The adjusted position also applies to test mode No.0704.		
		Range : 0 to 2150 (0 pulse to 2150 pulses) Unit : 1 (1 pulse) Default : 1434 (1434 pulses)		
0788	Paper feeder Active/Inactive selection		Paper feeder Active/Inactive selection	
		Allows master making and printing action without Paper feed tray movement. The selected setting is not stored. The setting returns to the default once the machine goes out of test mode.		Allows master making and printing action without Paper feed tray movement. The selected setting is not stored. The setting returns to the default once the machine goes out of test mode.
		Setting: 0 : Inactive <default> 1 : Active		Setting: 0 : Inactive <default> 1 : Active

7. Print Drum / Printing Test Mode

EZ5			EZ2 & EZ3		
No.	Sensor & Switch Check				
0801	Position-B sensor		Position-B sensor		
		ON: Sensor blocked (Machine is at Position-B)		ON: Sensor blocked (Machine is at Position-B)	
0802	Main motor FG sensor		Main motor FG sensor		
		ON: Detecting the FG disc.		ON: Detecting the FG disc.	
0803	Clamp sensor A		Clamp sensor A		
		ON: Sensor light blocked.		ON: Sensor light blocked.	
0804	Clamp sensor B		Clamp sensor B		
		ON: Sensor light blocked.		ON: Sensor light blocked.	
0806	Master loading sensor		Master loading sensor		
		ON: Detecting master		ON: Detecting master	
0807	Print drum lock sensor		Print drum lock sensor		
		ON: Drum lock lever is at lock position.)		ON: Drum lock lever is at lock position.)	
0809	Ink sensor		Ink sensor		
		ON: Detecting ink		ON: Detecting ink	
0810	Overflow sensor		Overflow sensor		
		ON: Detecting ink		ON: Detecting ink	
0811	Ink bottle set switch		Ink bottle set switch		
		ON: Switch is pressed		ON: Switch is pressed	
0812	Inking motor FG sensor		Inking motor FG sensor		
		ON: Detecting FG disc		ON: Detecting FG disc	
0816	Drum free rotation button		Drum free rotation button		
		ON: Button (switch) is pressed		ON: Button (switch) is pressed	
0817	Front door set sensor		Front door set sensor		
		ON: Front door is closed		ON: Front door is closed	
0818	Print drum release button		Print drum release button		
		ON: Button is pressed		ON: Button is pressed	
0819	Print drum connection signal		Print drum connection signal		
		ON: Print drum is connected		ON: Print drum is connected	
0820	Drum safety switch		Drum safety switch		
		ON: Print drum is set in position (switch pressed).		ON: Print drum is set in position (switch pressed).	
0830	Pressure HP sensor		Pressure HP sensor		
		ON: Sensor light blocked.		ON: Sensor light blocked.	
0831	Vertical print positioning HP sensor		Vertical print positioning HP sensor		
		ON: Sensor light blocked.		ON: Sensor light blocked.	
No.	Motor & Solenoid				
0861	Main motor action (30 rpm)		Main motor action (30 rpm)		
		Print drum rotation at speed of 30rpm.		Print drum rotation at speed of 30rpm.	
0863	Clamp motor action (Normal direction)		Clamp motor action (Normal direction)		
		Rotates the Clamp motor in counter-clockwise direction		Rotates the Clamp motor in counter-clockwise direction	
0864	Clamp-motor action (Opposite direction)		Clamp-motor action (Opposite direction)		
		Rotates the Clamp motor in clockwise direction		Rotates the Clamp motor in clockwise direction	
0866	Print-drum release button LED		Print-drum release button LED		
		Illuminates the LED		Illuminates the LED	
No.	Unit Check				
0880	Print drum rotation (variable speed)		Print drum rotation (variable speed)		
		Rotates the Print drum at the speed selected by the printing speed key. 1=60rpm / 2=80rpm / 3=100rpm / 4=120rpm / 5=130rpm		Rotates the Print drum at the speed selected by the printing speed key. 1=60rpm / 2=80rpm / 3=100rpm / 4=120rpm / 5=130rpm	

EZ5		EZ2 & EZ3	
0881	Print drum stop at Position-A	Print drum stop at Position-A	
	Rotates and stops the Print drum at Position-A.	Rotates and stops the Print drum at Position-A.	
0882	Inking motor ON action	Inking motor ON action	
	Activates the Inking motor (maximum 10 seconds). Caution: This test mode is to check the IC driver. Disconnect the connector to the Inking motor before the activation. Otherwise the machine will be damaged.	Activates the Inking motor (maximum 10 seconds). Caution: This test mode is to check the IC driver. Disconnect the connector to the Inking motor before the activation. Otherwise the machine will be damaged.	
0883	Clamp home positioning action	Clamp home positioning action	
	Resets the clamp unit to the home position.	Resets the clamp unit to the home position.	
0884	Clamp unit cycle action (3 step cycle)	Clamp unit cycle action (3 step cycle)	
	Make sure to bring the print drum to Position-A by test mode No. 0881 before activating this test mode to prevent machine damage. Press START key each time to perform the operations specified below. Step 1: From clamp plate closed position to clamp open. Step 2: From Clamp open position to Position-A compensation action. Step 3: From Position-A compensation action to clamp closed position.	Make sure to bring the print drum to Position-A by test mode No. 0881 before activating this test mode to prevent machine damage. Press START key each time to perform the operations specified below. Step 1: From clamp plate closed position to clamp open. Step 2: From Clamp open position to Position-A compensation action. Step 3: From Position-A compensation action to clamp closed position.	
0885	Print drum lock solenoid ON/OFF action	Print drum lock solenoid ON/OFF action	
	Press START key to switch ON the drum lock solenoid. The solenoid switches OFF automatically 10 seconds later.	Press START key to switch ON the drum lock solenoid. The solenoid switches OFF automatically 10 seconds later.	
0886	Pressure solenoid ON/OFF action.	Pressure solenoid ON/OFF action.	
	Press START key to switch ON the pressure solenoid. The solenoid switches OFF automatically 10 seconds later.	Press START key to switch ON the pressure solenoid. The solenoid switches OFF automatically 10 seconds later.	
0887	Print drum inking action	Print drum inking action	
	Performs the inking operations in following sequence by one press of the START key: 1. Pumps in the ink into print drum while rotating the drum until the Ink Sensor detects Ink, without pressure roller touching the Print drum. 2. Makes a confidential master on the Print drum. 3. Rotates the Print drum with the Pressure Roller pressing against the print drum. 4. The print drum stops at Position-B.	Performs the inking operations in following sequence by one press of the START key: 1. Pumps in the ink into print drum while rotating the drum until the Ink Sensor detects Ink, without pressure roller touching the Print drum. 2. Makes a confidential master on the Print drum. 3. Rotates the Print drum with the Pressure Roller pressing against the print drum. 4. The print drum stops at Position-B.	

EZ5		EZ2 & EZ3	
0888	Print drum ink-drainage action	Print drum ink-drainage action	
	<p>Performs the ink drainage from the print drum in following sequence by one press of the START key:</p> <ol style="list-style-type: none"> 1. Makes TPH test mode image on the master and wraps around the print drum. 2. Printing is started with no inking motion and with the ink sensor deactivated. 3. The printing is continued until the STOP key is pressed. 4. The print drum stops at Position-B. 	<p>Performs the ink drainage from the print drum in following sequence by one press of the START key:</p> <ol style="list-style-type: none"> 1. Makes TPH test mode image on the master and wraps around the print drum. 2. Printing is started with no inking motion and with the ink sensor deactivated. 3. The printing is continued until the STOP key is pressed. 4. The print drum stops at Position-B. 	
0889	G-Lever mounting position	G-Lever mounting position	
	<p>Stops the machine at G-Lever mounting position (Print drum at 108.4 degrees from Position-A).</p> <p>* This is the test mode to activate when mounting the removed G-Lever back on the machine.</p>	<p>Stops the machine at G-Lever mounting position (Print drum at 108.4 degrees from Position-A).</p> <p>* This is the test mode to activate when mounting the removed G-Lever back on the machine.</p>	
0890	Print drum ink-code copy	Print drum ink-code copy	
	<p>Copies the ink information (ink color, ink category, etc.) onto the Print drum EEPROM from the Ink TAG.</p> <p>* Wait over 2 seconds after inserting the ink bottle in the Print drum before executing the test mode.</p>	<p>Copies the ink information (ink color, ink category, etc.) onto the Print drum EEPROM from the Ink TAG.</p> <p>* Wait over 2 seconds after inserting the ink bottle in the Print drum before executing the test mode.</p>	
0892	Position-B stop (The position in which the pint drum can be removed from the machine.)	Position-B stop (The position in which the pint drum can be removed from the machine.)	
	<p>Stops the print drum at machine Position-B. (The test mode can be activated with or without print drum in the machine.)</p>	<p>Stops the print drum at machine Position-B. (The test mode can be activated with or without print drum in the machine.)</p>	
0896	Print drum free-rotation		
	<p>Print drum rotates at 10rpm.</p> <p>Rear cover safety switch must be ON to activate. Buzzer sounds until the Rear cover safety switch becomes ON.</p>		
0900	Vertical print position home positioning	Vertical print position home positioning	
	Moves the vertical print position to home position.	Moves the vertical print position to home position.	
0901	Vertical print position one cycle action.	Vertical print position one cycle action.	
	<p>Following one-cycle action is made by driving the Vertical print positioning pulse motor..</p> <ol style="list-style-type: none"> 1. Brings the vertical print position to home position. 2. Moves the vertical print position to maximum top position (+16mm) and stops for 1 second. 3. Brings the vertical print position to home position. 4. Moves the vertical print position to maximum down position (-16mm) and stop for 1 second. 5. Brings the vertical print position to home position. 	<p>Following one-cycle action is made by driving the Vertical print positioning pulse motor..</p> <ol style="list-style-type: none"> 1. Brings the vertical print position to home position. 2. Moves the vertical print position to maximum top position (+16mm) and stops for 1 second. 3. Brings the vertical print position to home position. 4. Moves the vertical print position to maximum down position (-16mm) and stop for 1 second. 5. Brings the vertical print position to home position. 	

EZ5		EZ2 & EZ3	
0904	Printing pressure home positioning.	Print pressure home positioning.	
	Brings the printing pressure to the center position.	Brings the printing pressure to the center position.	
0905	Printing pressure 1 cycle action	Printing pressure 1 cycle action	
	Following one-cycle action is made by driving the Pressure control pulse motor. 1. Brings the printing pressure to home position. 2. Change the printing pressure to the maximum pressure position (+10500 pulses) and stops for 1 second. 3. Brings the printing pressure to home position. 4. Change the printing pressure to the minimum pressure position (-9300 pulses) and stops for 1 second. 5. Brings the printing pressure to home position.	[Not available on EZ2] Following one-cycle action is made by driving the Pressure control pulse motor. 1. Brings the printing pressure to home position. 2. Change the printing pressure to the maximum pressure position (+10500 pulses) and stops for 1 second. 3. Brings the printing pressure to home position. 4. Change the printing pressure to the minimum pressure position (-9300 pulses) and stops for 1 second. 5. Brings the printing pressure to home position.	
0908	Printing pressure maintenance positioning.	Printing pressure maintenance positioning.	
	Drives the Pressure control pulse motor -8130 pulses to release the pressure on the Pressure spring. This is the position to remove the Pressure spring.	[Not available on EZ2] Drives the Pressure control pulse motor -8130 pulses to release the pressure on the Pressure spring. This is the position to remove the Pressure spring.	
No.	Data Check		
0921	Print drum angle display	Print drum angle display	
	Displays the present print-drum angle. (example: 3600 = 360 degrees)	Displays the present print-drum angle. (example: 3600 = 360 degrees)	
0923	Print drum ink temperature display (Degrees Celsius)	Print drum ink temperature display (Degrees Celsius)	
	Displays the temperature of the ink in the print drum in degrees Celsius.	Displays the temperature of the ink in the print drum in degrees Celsius.	
0925	Ink remaining volume display	Ink remaining volume display	
	Displays the amount of ink left in the ink tube in percentage (%). [Ink TAG information]	Displays the amount of ink left in the ink tube in percentage (%). [Ink TAG information]	
0926	Inking motor FG count	Inking motor FG count (ten-thousand digit)	
	Displays the inking motor FG count value read from the ink cartridge tag. (1 count = 0.1 ml)	Displays the inking motor FG count value read from the ink cartridge tag to the ten-thousand digit. (1 count = 0.1 ml) Example: 23,546 count will display as 0002.	
0927		Inking motor FG count (up to thousand digit)	
		Displays the inking motor FG count value read from the ink cartridge tag up to thousand digit. (1 count = 0.1 ml) Example: 23,546 count will display as 3546.	
0928	Displays the Ink cartridge using start date.	Displays the Ink cartridge using start date.	
	Displays the Ink usage starting date. Example: For year 2007 December 28th, the display indicates 2007 and 1228 alternately.]	Displays the Ink usage starting date. Example: For year 2007 December 28th, the display indicates 2007 and 1228 alternately.]	
No.	Data Setting		
0940	Master loading sensor detection timing adjustment	Master loading sensor detection timing adjustment	
	Adjusts the angle to detect master on the print drum by master loading sensor.	Adjusts the angle to detect master on the print drum by master loading sensor.	
	Range : -200 to +100 (-20.0 to +10.0 degrees) (+ delays the detection timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	Range : -200 to +100 (-20.0 to +10.0 degrees) (+ delays the detection timing) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	

EZ5		EZ2 & EZ3	
0941	Print drum Position-A adjustment	Print drum Position-A adjustment	
	Adjusts the print-drum Position-A stop position.	Adjusts the print-drum Position-A stop position.	
	Range : -40 to +40 (-4.0 to +4.0 degrees) (+ moves drum forward in over-run direction) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	Range : -40 to +40 (-4.0 to +4.0 degrees) (+ moves drum forward in over-run direction) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	
0942	Print drum Position-B adjustment	Print drum Position-B adjustment	
	Adjusts the print-drum Position-B stop position.	Adjusts the print-drum Position-B stop position.	
	Range : -40 to +40 (-4.0 to +4.0 degrees) (+ moves drum forward in over-run direction) Unit : 5 (0.5 degrees) Default : -15 (-1.5 degrees)	Range : -40 to +40 (-4.0 to +4.0 degrees) (+ moves drum forward in over-run direction) Unit : 5 (0.5 degrees) Default : 0 (0 degrees)	
0943	Inking time adjustment (when over X% of ink is consumed from the ink tube.)	Inking time adjustment (when over X% of ink is consumed from the ink tube.)	
	Timer setting before the Replace Ink Cartridge message comes up (when the ink consumption amount from the tube is over X%, which is set by test mode No.0948).	Timer setting before the Replace Ink Cartridge message comes up (when the ink consumption amount from the tube is over X%, which is set by test mode No.0948).	
	Range : 5 to 60 (5 to 60 seconds) Unit : 1 (1 second) Default : 10 (10 seconds)	Range : 5 to 60 (5 to 60 seconds) Unit : 1 (1 second) Default : 10 (10 seconds)	
0944	Inking time adjustment (right after the ink tube is replaced)	Inking time adjustment (right after the ink tube is replaced)	
	Timer setting before the Replace Ink Cartridge message comes up (right after empty ink tube is replaced with a new one.)	Timer setting before the Replace Ink Cartridge message comes up (right after empty ink tube is replaced with a new one.)	
	Range : 5 to 60 (5 to 60 seconds) Unit : 1 (1 second) Default : 30 (30 seconds)	Range : 5 to 60 (5 to 60 seconds) Unit : 1 (1 second) Default : 30 (30 seconds)	
0945	Ink overflow detection frequency adjustment	Ink overflow detection frequency adjustment	
	Sets the number of detection times for the Overflow sensor to determine that an ink overflow has occurred in the Print drum.	Sets the number of detection times for the Overflow sensor to determine that an ink overflow has occurred in the Print drum.	
	Range : 1 to 200 (1 to 200 times) Unit : 1 (1 time) Default : 50 (50 times)	Range : 1 to 100 (1 to 100 times) Unit : 1 (1 time) Default : 50 (50 times)	
0946	Inking time adjustment (when under X% of ink is consumed from the ink tube.)	Inking time adjustment (when under X% of ink is consumed from the ink tube.)	
	Timer setting before the Replace Ink Cartridge message comes up (when the ink consumption amount from the tube is under X%, which is set by test mode No.0948).	Timer setting before the Replace Ink Cartridge message comes up (when the ink consumption amount from the tube is under X%, which is set by test mode No.0948).	
	Range : 1 to 60 (1 to 60 seconds) Unit : 1 (1 second) Default : 15 (15 seconds)	Range : 1 to 60 (1 to 60 seconds) Unit : 1 (1 second) Default : 15 (15 seconds)	
0947	Inking drum rotation quantity (while inking) after ink tube is pulled out and put back.	Inking drum rotation quantity (while inking) after ink tube is pulled out and put back.	
	Drum rotation quantity while inking after the ink tube is pulled out and put back.	Drum rotation quantity while inking after the ink tube is pulled out and put back.	
	Range : 0 to 10 (0 to 10 rotations) Unit : 1 (1 rotation) Default : 1 (1 rotation)	Range : 0 to 10 (0 to 10 rotations) Unit : 1 (1 rotation) Default : 1 (1 rotation)	

EZ5		EZ2 & EZ3	
0948	Selection of X% for test modes No. 0943 and 0946.	Selection of X% for test modes No. 0943 and 0946.	
	The X% selection relates to that of test modes No. 0943 and 0946.	The X% selection relates to that of test modes No. 0943 and 0946.	
0949	Range: 1 to 100 (1 to 100%) Unit : 1 (1%) Default : 80 (80%)	Range: 1 to 100 (1 to 100%) Unit : 1 (1%) Default : 80 (80%)	
	Print pressure setting for Proof-read printing (Black Ink)	Print pressure setting for Proof-read printing (Black Ink)	
0949	Selects print pressure for printing the proof-read print after each master-making. (Black Ink)	[Not available on EZ2]	
	Setting: 0 : extra light 1 : light 2 : normal <default> 3 : dark 4 : extra dark 5 : maximum dark	Selects print pressure for printing the proof-read print after each master-making. (Black Ink) Setting: 0 : extra light 1 : light 2 : normal <default> 3 : dark 4 : extra dark 5 : maximum dark	
0950	Print pressure setting for Proof-read printing (color ink)	Print pressure setting for Proof-read printing (color ink)	
	Selects print pressure for printing the proof-read print after each master-making. (Color Ink)	[Not available on EZ2]	
0950	Setting: 0 : extra light 1 : light 2 : normal <default> 3 : dark 4 : extra dark 5 : maximum dark	Selects print pressure for printing the proof-read print after each master-making. (Color Ink) Setting: 0 : extra light 1 : light 2 : normal <default> 3 : dark 4 : extra dark 5 : maximum dark	
0951	Ink color code	Ink color code	
	Ink color code setting on inkless print drum.	Ink color code setting on inkless print drum.	
0951	Setting: 0 : No Selection (default) 64: Black 1 65: Blue 1 66: Blue 2 67: Blue 3 68: Blue 4 69: Red 1 70: Red 2 71: Red 3 72: Red 4 73: Green 1 74: Green 2 75: Green 3 76: Yellow 1 77: Yellow 2 78: Brown 1 79: Brown 2 80: Purple 1 81: Purple 2 82: Grey 1 83: Grey 2 84: Light grey 1 85: Light grey 2 86: Orange 1 87: Orange 2 88: Gold 1 89: Gold 2 90: Silver 1 91: Silver 2 92: Pink 1 93: Pink 2 94: Custom	Setting: 0 : No Selection (default) 64: Black 1 65: Blue 1 66: Blue 2 67: Blue 3 68: Blue 4 69: Red 1 70: Red 2 71: Red 3 72: Red 4 73: Green 1 74: Green 2 75: Green 3 76: Yellow 1 77: Yellow 2 78: Brown 1 79: Brown 2 80: Purple 1 81: Purple 2 82: Grey 1 83: Grey 2 84: Light grey 1 85: Light grey 2 86: Orange 1 87: Orange 2 88: Gold 1 89: Gold 2 90: Silver 1 91: Silver 2 92: Pink 1 93: Pink 2 94: Custom	
0970	Vertical print position HP adjustment	Vertical print position HP adjustment	
	Sets the HP (center) position of the vertical print position.	Sets the HP (center) position of the vertical print position.	
0970	Range : -50 to +50 (-5.0 mm to +5.0 mm) (+ values move the printed image up) Unit : 1 (0.1 mm) Default : 0 (0 mm)	Range : -50 to +50 (-5.0 mm to +5.0 mm) (+ values move the printed image up) Unit : 1 (0.1 mm) Default : 0 (0 mm)	

EZ5		EZ2 & EZ3	
0972	Printing pressure HP adjustment	Printing pressure HP adjustment	
	Offsets the HP (center) position of the printing pressure.	[Not available on EZ2] Offsets the HP (center) position of the printing pressure.	
	Range : -500 to +500 (-5000 pulses to + 5000 pulses) (+ values move print pressure table up -- increases print pressure) Unit : 1 (10 pulses) Default : 0 (0 pulse)	Range : -500 to +500 (-5000 pulses to + 5000 pulses) (+ values move print pressure table up -- increases print pressure) Unit : 1 (10 pulses) Default : 0 (0 pulse)	

8. Protected Area Test Mode

EZ5		EZ2 & EZ3	
No.	Unit Check		
1102	Paper size VR adjustment	Paper size VR adjustment	
	Sets a VR value at paper guide fence width of 105 mm (A6 paper width).	Sets a VR value at paper guide fence width of 105 mm (A6 paper width).	
1103	Paper size VR adjustment	Paper size VR adjustment	
	Sets a VR value at paper guide fence width of 297 mm (A3 paper width).	Sets a VR value at paper guide fence width of 297 mm (A3 paper width).	
1104	LCD Base Point Compensation		
	Perform the following adjustment in the order given. 1) Touch two diagonally opposite markings. 2) On the confirmation display, touch the three marking to confirm the adjustment.		
No.	Data Clear		
1198	Memory Initialization	Memory Initialization	
	Initializes the memory on the Mechanical Control PCB. (This test mode is not included in the test mode list on the display.)	Initializes the memory on the Mechanical Control PCB. (This test mode is not included in the test mode list on the display.)	
No.	Data Setting		
1201	Paper Size Selection	Paper Size Selection	
	Selects the paper size detection unit in either INCH, MILLIMETER or CHINESE.	Selects the paper size detection unit in either INCH, MILLIMETER or CHINESE.	
	Setting: 0 : Millimeter <default on all machines other than Chinese or USA specification> 1 : Chinese paper sizes <default on Chinese specification machines> 2 : Inch <default on USA specification machines>	Setting: 0 : Millimeter <default on all machines other than Chinese or USA specification> 1 : Chinese paper sizes <default setting differs according to the machine modes.> 2 : Inch <default on USA specification machines>	
1210	Drum Code Entry	Drum Code Entry	
	Sets the print drum information on the EEPROM of the Drum PCB.	Sets the print drum information on the EEPROM of the Drum PCB.	
	Range : 0 to 255 Setting: 113: A3 114: B4 115: A4 / Letter 116: A4-R / Letter-R 117: Ledger Default : 0	Range : 0 to 255 Setting: [EZ2 Series] 98: B4 99: A4 / Letter 102: Legal / Foolscap [EZ3 Series] 113: A3 114: B4 115: A4 / Letter 117: Ledger Default : 0	
1211	Drum Serial Code Entry 1	Drum Serial Code Entry 1	
	Inputs the first 4 -digits of the print drum serial number Range : 0 to 9999 Unit : 1 Default : 0	Inputs the first 4 -digits of the print drum serial number Range : 0 to 9999 Unit : 1 Default : 0	

EZ5		EZ2 & EZ3	
1212	Drum Serial Code Entry 2	Drum Serial Code Entry 2	
	Inputs the last 4 -digits of the print drum serial number	Inputs the last 4 -digits of the print drum serial number	
	Range : 0 to 9999 Unit : 1 Default : 0	Range : 0 to 9999 Unit : 1 Default : 0	
1214	Drum Color Code Entry	Drum Color Code Entry	
	Sets the print drum color information on the EEPROM of the Drum PCB.	Sets the print drum color information on the EEPROM of the Drum PCB.	
	Setting: 0: Not Specified <default> 1: Black 2: Blue 3: Medium Blue 4: Red 5: Bright Red 6: Riso Federal Blue 7: Purple 8: Riso Marine Red 9: Burgundy 10: Green 11: Teal 12: Brown 13: Yellow 14: Light Grey 15: Grey 16: Fluorescence Pink 17: Fluorescence Orange 18: Orange 19: Flat Gold 20: Hunter Green 21: Crimson 30: Custom 31: Order (with specified paper) 32: Order (without specified paper) 63: Any Color	Setting: 0: Not Specified <default> 1: Black 2: Blue 3: Medium Blue 4: Red 5: Bright Red 6: Riso Federal Blue 7: Purple 8: Riso Marine Red 9: Burgundy 10: Green 11: Teal 12: Brown 13: Yellow 14: Light Grey 15: Grey 16: Fluorescence Pink 17: Fluorescence Orange 18: Orange 19: Flat Gold 20: Hunter Green 21: Crimson 30: Custom 31: Order (with specified paper) 32: Order (without specified paper) 63: Any Color	
1220	Scanner Adjustment (1) Vertical scan skip amount adjustment. (Factory adjustment)	Scanner Adjustment (1) Vertical scan skip amount adjustment. (Factory adjustment)	
	Adjusts the vertical scanning skip amount. (Factory adjustment)	Adjusts the vertical scanning skip amount. (Factory adjustment)	
	Range : 0 to 255 (-3mm to +3mm) (+ values increase the scan skip amount) Unit : 1 (0.0508mm) Default : 128	Range : 68 to 188 (-3mm to +3mm) (+ values increase the scan skip amount) Unit : 1 (0.0508mm) Default : 128	
1221	Scanner Adjustment (2) Horizontal scan position adjustment. (Factory adjustment)	Scanner Adjustment (2) Horizontal scan position adjustment. (Factory adjustment)	
	Adjusts the horizontal scanning position. (Factory adjustment)	Adjusts the horizontal scanning position. (Factory adjustment)	
	Range : 0 to 255 (-3mm to +3mm) (+ values move the scanning position to the right --- printed image shifts to left.) Unit : 1 (0.0423mm for 600 dpi) Default : 128	Range : 92 to 164 (-3mm to +3mm) (+ values move the scanning position to the right --- printed image shifts to left.) Unit : 1 (0.0847mm for 300 dpi) Default : 128	

EZ5		EZ2 & EZ3	
1222	Scanner Adjustment (3) Vertical image elongation/shrinkage adjustment. (Factory adjustment)	Scanner Adjustment (3) Vertical image elongation/shrinkage adjustment. (Factory adjustment)	
	Adjusts the vertical image elongation/shrinkage. (Factory adjustment)	Adjusts the vertical image elongation/shrinkage. (Factory adjustment)	
	Range : 0 to 100 (-5% to +5%) (+ values shrinks the image) Unit : 1 (0.1%) Default : 50	Range : 0 to 100 (-5% to +5%) (+ values shrinks the image) Unit : 1 (0.1%) Default : 50	
1223	Scanner Adjustment (4) Offset adjustment. (Factory adjustment)	Scanner Adjustment (4) Offset adjustment. (Factory adjustment)	
	Offset adjustment of the scanner. (Factory adjustment)	Offset adjustment of the scanner. (Factory adjustment)	
	Range : -255 to 255 Unit : 1 Default : -255 Note: The input number changes to another number after the test mode is reactivated. Use the newly displayed value from the next Offset adjustment for that one particular scanner unit.	Range : -255 to 255 Unit : 1 Default : -255 Note: The input number changes to another number after the test mode is reactivated. Use the newly displayed value from the next Offset adjustment for that one particular scanner unit.	
1224	Scanner Adjustment (5) Gain adjustment. (Factory adjustment)	Scanner Adjustment (5) Gain adjustment. (Factory adjustment)	
	Gain adjustment of the scanner. (Factory adjustment)	Gain adjustment of the scanner. (Factory adjustment)	
	Range : 0 to 63 Unit : 1 Default : 0 Note: The input number changes to another number after the test mode is reactivated. Use the newly displayed value from the next Gain adjustment for that one particular scanner unit.	Range : 0 to 63 Unit : 1 Default : 0 Note: The input number changes to another number after the test mode is reactivated. Use the newly displayed value from the next Gain adjustment for that one particular scanner unit.	
1229	RLP Activation/Deactivation	RLP Activation/Deactivation	
	Activates or deactivates the RLP function.	Activates or deactivates the RLP function.	
	Setting: 0 : Inactive <default> 1 : Active	Setting: 0 : Inactive <default> 1 : Active	
1231	Panel Contrast Adjustment		
	Adjusts the contrast of the operation panel display.		
	Range : -120 to +120 Unit : 1 Default : 0		
1232	Panel Back-light Adjustment		
	Adjusts the back-light of the operation panel display.		
	Range : 50 to 115 Unit : 1 Default : 85		

EZ5		EZ2 & EZ3	
1233	TPH master-making horizontal position adjustment	TPH master-making horizontal position adjustment	
	Sets the TPH master-making position to the center	Sets the TPH master-making position to the center	
	Range : -30 to +30 (-3.0mm to +3.0mm) (+ values bring the master-making image to the left) Unit : 1 (0.1mm) Default : 0 (0mm)	Range : -30 to +30 (-3.0mm to +3.0mm) (+ values bring the master-making image to the left) Unit : 1 (0.1mm) Default : 0 (0mm)	
1234	TPH resistance input	TPH resistance input	
	Sets TPH resistance.	Sets TPH resistance.	
	Range : 1200 to 2300 (1200 to 2300 ohm) Unit : 1 (1 ohm) Default : 1200 (1200 ohm)	Range : 1200 to 2300 (1200 to 2300 ohm) Unit : 1 (1 ohm) Default : 1200 (1200 ohm)	

9. Options (AF) Test Mode

EZ5			EZ2 & EZ3		
No.	Sensor & Switch Check				
3000	AF-unit connection signal check		AF-unit connection signal check		
		ON: AF connected		ON: AF connected	
3001	AF Original registration sensor		AF Original registration sensor		
		ON: Original detected		ON: Original detected	
3002	AF Original IN sensor		AF Original IN sensor		
		ON: Original detected		ON: Original detected	
3003	AF Original OUT sensor		AF Original OUT sensor		
		ON: Original detected		ON: Original detected	
3004	AF original detection sensor		AF original detection sensor		
		ON: Original detected		ON: Original detected	
3005	AF Cover Set SW		AF Cover Set SW		
		ON: AF closed		ON: AF closed	
3006	AF Original Size Sensor 1				
		ON: Original detected			
3007	AF Original Size Sensor 2				
		ON: Original detected			
No.	Motor & Solenoid				
3030	AF read pulse-motor CW		AF read pulse-motor CW		
		Activates the AF read pulse-motor in original feeding direction.		Activates the AF read pulse-motor in original feeding direction.	
No.	Unit Check				
3041	AF one cycle action with no Auto Base Control		AF one cycle action with no Auto Base Control		
		Performs one AF scanning cycle. 1. Picks up original. 2. Scanner unit moves to home position. 3. Shading compensation. 4. Scanner unit moves to scanning position. 5. Feeds and ejects the original. 6. Carriage returns to the home position.		Performs one AF scanning cycle. 1. Picks up original. 2. Scanner unit moves to home position. 3. Shading compensation. 4. Scanner unit moves to scanning position. 5. Feeds and ejects the original. 6. Carriage returns to the home position.	
3042	AF original feed action		AF original feed action		
		Performs AF original feed operation		Performs AF original feed operation	
3044	Original IN Sensor Sensitivity Adjustment		Original IN Sensor Sensitivity Adjustment		
		Sensitivity adjustment on the Original IN Sensor.		Sensitivity adjustment on the Original IN Sensor.	
3045	AF Original Guide Minimum Width				
		Sets the VR value when the paper guides are brought to the minimum-width position.			
3046	AF Original Guide Maximum Width				
		Sets the VR value when the paper guides are brought to the maximum-width position.			
No.	Data Check				
3060	AF Guide width A/D data				
		AF Guide width AF 10 bit data.			
3061	AF Original Size Code				
		Displays the size of the original set on AF unit. 00: No detection 01: A3 02: B4 03: A4 04: A4-R 05: B5 06: B5-R 07: A5 08: A5-R 09: B6 11: Postcard 13: Ledger 14: Legal 15: Letter 16: Letter-R 17: Statement 18: Statement-R 19: Foolscap 53: Custom			

EZ5			EZ2 & EZ3		
No.	Data Setting				
3070	Mirror carriage scanning position adjustment. (AF scanning)		Mirror carriage scanning position adjustment. (AF scanning)		
		Adjusts the position of the mirror carriage for AF scanning.		Adjusts the position of the mirror carriage for AF scanning.	
		Range : -20 to +20 (-2.0mm to +2.0mm) (+ values move the Mirror carriage back --- moves the image up) Unit : 1 (0.1 mm) Default : 0 (0 mm)		Range : -20 to +20 (-2.0mm to +2.0mm) (+ values move the Mirror carriage back --- moves the image up) Unit : 1 (0.1 mm) Default : 0 (0 mm)	
3071	Mirror carriage position adjustment for Auto-Base-Control. (AF scanning)		Mirror carriage position adjustment for Auto-Base-Control. (AF scanning)		
		Adjusts the position of the mirror carriage for AF Auto Base Control scanning.		Adjusts the position of the mirror carriage for AF Auto Base Control scanning.	
		Range : 0 to +30 (0mm to +3.0mm) (+ values move the Mirror carriage back --- moves the image up) Unit : 1 (0.1 mm) Default : 0 (0 mm)		Range : 0 to +30 (0mm to +3.0mm) (+ values move the Mirror carriage back --- moves the image up) Unit : 1 (0.1 mm) Default : 0 (0 mm)	
3072	AF scanning horizontal centering position adjustment		AF scanning horizontal centering position adjustment		
		Adjusts the horizontal scanning position when the original is scanned on AF.		Adjusts the horizontal scanning position when the original is scanned on AF.	
		Range : -30 to +30 (-3.0mm to +3.0mm) (+ values move the image to the left) Unit : 5 (0.5 mm) Default : 0 (0 mm)		Range : -30 to +30 (-3.0mm to +3.0mm) (+ values move the image to the left) Unit : 5 (0.5 mm) Default : 0 (0 mm)	
3073	Scanning start-position adjustment. (AF scanning)		Scanning start-position adjustment. (AF scanning)		
		Adjusts the scanning start position against the original when the original is scanned using the AF. (Adjusts how much area to skip from the top of the original when the scanning starts.)		Adjusts the scanning start position against the original when the original is scanned using the AF. (Adjusts how much area to skip from the top of the original when the scanning starts.)	
		Range : -60 to +60 (-6.0mm to +6.0mm) (+ values move the image up) Unit : 1 (0.1 mm) Default : 0 (0 mm)		Range : -60 to +60 (-6.0mm to +6.0mm) (+ values move the image up) Unit : 1 (0.1 mm) Default : 0 (0 mm)	
3074	Scanning-speed adjustment to control Elongation & Shrinkage in scanning. (AF scanning)		Scanning-speed adjustment to control Elongation & Shrinkage in scanning. (AF scanning)		
		Adjusts the speed of the AF-Read pulse motor to control the speed of the Original through the AF.		Adjusts the speed of the AF-Read pulse motor to control the speed of the Original through the AF.	
		Range : -50 to +50 (-5.0% to +5.0%) (+ values elongate the image) Unit : 1 (0.1%) Default : 0 (0 %)		Range : -50 to +50 (-5.0% to +5.0%) (+ values elongate the image) Unit : 1 (0.1%) Default : 0 (0 %)	
3076	AF Scanning End Signal Output Timing		AF Scanning End Signal Output Timing		
		Adjusts original scanning end position.		Adjusts original scanning end position.	
		Range: -63 to +63 (-6.3 mm to +6.3 mm) * (<+> for adjustment down) Unit: 1 (0.1 mm) Default: 0 (0 mm)		Range: -63 to +63 (-6.3 mm to +6.3 mm) * (<+> for adjustment down) Unit: 1 (0.1 mm) Default: 0 (0 mm)	

10. Options (Job Separator) Test Mode

EZ5		EZ2 & EZ3	
No.	Sensor & Switch Check		
3100	Job separator tape jam sensor	Job separator tape jam sensor	
	ON: Jammed tape is detected	ON: Jammed tape is detected	
3101	Job separator tape detection sensor	Job separator tape detection sensor	
	ON: Tape is detected	ON: Tape is detected	
3102	Job separator power switch	Job separator power switch	
	ON: Power is supplied to the Job separator	ON: Power is supplied to the Job separator	
3103	Job separator connection signal	Job separator connection signal	
	ON: Job separator is connected	ON: Job separator is connected	
No.	Unit Check		
3140	Tape output (Job Separator)	Tape output (Job Separator)	
	Outputs one tape.	Outputs one tape.	
No.	Data Setting		
3170	Stamping quantity	Stamping quantity	
	Sets number of times the stamper stamps per one tape cut by test mode No. 3140.	Sets number of times the stamper stamps per one tape cut by test mode No. 3140.	
	0: No stamping <default>	0: No stamping <default>	
	1: One stamping	1: One stamping	
3171	2: Two stamping	2: Two stamping	
	Activate or deactivate the tape jammed message	Activate or deactivate the tape jammed message	
	Activates or deactivates the Tape Jam message while using the Job Separator.	Activates or deactivates the Tape Jam message while using the Job Separator.	
	0: Does not show the jammed message.	0: Does not show the jammed message.	
3172	1: Shows the jammed message. <default>	1: Shows the jammed message. <default>	
	No separator tape at speed 4 and 5	No separator tape at speed 4 and 5	
	Activates or deactivates the Tape ejection at printing speed of 4 and 5. (Job Separator IV;NIII)	Activates or deactivates the Tape ejection at printing speed of 4 and 5.	
	0: No deactivation (tape ejection at all speeds).	0: No deactivation (tape ejection at all speeds).	
3173	1: Deactivate (no tape ejection). <default>	1: Deactivate (no tape ejection). <default>	
	2: Deactivate (no tape ejection) at all speeds.	2: Deactivate (no tape ejection) at all speeds.	
	ST tape cut timing adjustment (Slow Start)	ST tape cut timing adjustment (Slow Start)	
	Job Separator IV;NIII tape cut timing adjustment when printing at slow start.	Job Separator IV;NIII tape cut timing adjustment when printing at slow start.	
3174	Range : -200 to +200 (-20ms to +20ms)	Range : -200 to +200 (-20ms to +20ms)	
	Unit : 10 (1ms)	Unit : 10 (1ms)	
	Default : 0	Default : 0	
	ST tape cut timing adjustment (Speed 1)	ST tape cut timing adjustment (Speed 1)	
3175	Job Separator IV;NIII tape cut timing adjustment when printing at speed 1.	Job Separator IV;NIII tape cut timing adjustment when printing at speed 1.	
	Range : -200 to +200 (-20ms to +20ms)	Range : -200 to +200 (-20ms to +20ms)	
	Unit : 10 (1ms)	Unit : 10 (1ms)	
	Default : 0	Default : 0	
3176	ST tape cut timing adjustment (Speed 2)	ST tape cut timing adjustment (Speed 2)	
	Job Separator IV;NIII tape cut timing adjustment when printing at speed 2.	Job Separator IV;NIII tape cut timing adjustment when printing at speed 2.	
	Range : -200 to +200 (-20ms to +20ms)	Range : -200 to +200 (-20ms to +20ms)	
	Unit : 10 (1ms)	Unit : 10 (1ms)	
3177	Default : 0	Default : 0	
	ST tape cut timing adjustment (Speed 3)	ST tape cut timing adjustment (Speed 3)	
	Job Separator IV;NIII tape cut timing adjustment when printing at speed 3.	Job Separator IV;NIII tape cut timing adjustment when printing at speed 3.	
	Range : -200 to +200 (-20ms to +20ms)	Range : -200 to +200 (-20ms to +20ms)	
3178	Unit : 10 (1ms)	Unit : 10 (1ms)	
	Default : 0	Default : 0	
	ST tape cut timing adjustment (Speed 4)	ST tape cut timing adjustment (Speed 4)	
	Job Separator IV;NIII tape cut timing adjustment when printing at speed 4.	Job Separator IV;NIII tape cut timing adjustment when printing at speed 4.	
3179	Range : -200 to +200 (-20ms to +20ms)	Range : -200 to +200 (-20ms to +20ms)	
	Unit : 10 (1ms)	Unit : 10 (1ms)	
	Default : 0	Default : 0	
	ST tape cut timing adjustment (Speed 5)	ST tape cut timing adjustment (Speed 5)	
3180	Job Separator IV;NIII tape cut timing adjustment when printing at speed 5.	Job Separator IV;NIII tape cut timing adjustment when printing at speed 5.	
	Range : -200 to +200 (-20ms to +20ms)	Range : -200 to +200 (-20ms to +20ms)	
	Unit : 10 (1ms)	Unit : 10 (1ms)	
	Default : 0	Default : 0	

EZ5			EZ2 & EZ3		
No.	Data Setting				
3177	ST tape cut timing adjustment (Speed 4)		ST tape cut timing adjustment (Speed 4)		
	Job Separator IV;NIII tape cut timing adjustment when printing at speed 4.		Job Separator IV;NIII tape cut timing adjustment when printing at speed 4.		
	Range : -200 to +200 (-20ms to +20ms) Unit : 10 (1ms) Default : 0		Range : -200 to +200 (-20ms to +20ms) Unit : 10 (1ms) Default : 0		
3178	ST tape cut timing adjustment (Speed 5)		ST tape cut timing adjustment (Speed 5)		
	Job Separator IV;NIII tape cut timing adjustment when printing at speed 5.		Job Separator IV;NIII tape cut timing adjustment when printing at speed 5.		
	Range : -200 to +200 (-20ms to +20ms) Unit : 10 (1ms) Default : 0		Range : -200 to +200 (-20ms to +20ms) Unit : 10 (1ms) Default : 0		

11. Options (Memory) Test Mode

EZ5		EZ2 & EZ3	
No.	Unit Check		
3340	Storage Memory Composition Change		
		Processing for changing the card used on model RP to a configuration compatible with the current machine. CAUTION: 1) The card will no longer be RP compatible. 2) Insert only one card in the slot. Do not insert two cards.	
3341	PS7R Status Print		
		Prints out the PS7R status.	
No.	Data Clear		
3355	Storage Memory Initialize (32M)		
		Initializes the storage device to delete data from the 32M storage device or when an error related to storage device prevents data restoration. CAUTION: Insert only one card in the slot. Cannot initialize two cards at one time.	
3356	Storage Memory Initialize (128M)		
		Initializes the storage device to delete data from the 128M storage device or when an error related to storage device prevents data restoration. CAUTION: Insert only one card in the slot. Cannot initialize two cards at one time.	
No.	Data Check		
3361	Storage Memory Information		
		Displays the volume label, capacity, area used, and available storage area. CAUTION: Insert only one card in the slot. Cannot check two cards at one time.	

12. Options (Linked Printer) Test Mode

EZ5			EZ2 & EZ3		
No.	Data Setting				
3570	Linked printer - Print position adjustment (horizontally)		Linked printer - Print position adjustment (horizontally)		
		Horizontal print position adjustment on all the linked printers. The setting applies to all the RLP.		Horizontal print position adjustment on all the linked printers. The setting applies to all the RLP.	
		Range : -50 to +50 (-5.0mm to +5.0mm) (+ values move the image to the left.) Unit : 1 (0.1 mm) Default : 0 (0 mm)		Range : -50 to +50 (-5.0mm to +5.0mm) (+ values move the image to the left.) Unit : 1 (0.1 mm) Default : 0 (0 mm)	
3571	Linked printer - Print position adjustment (vertically)		Linked printer - Print position adjustment (vertically)		
		Vertical print position adjustment on all the linked printers. The setting applies to all the RLP.		Vertical print position adjustment on all the linked printers. The setting applies to all the RLP.	
		Range : -50 to +50 (-5.0mm to +5.0mm) (+ values move the image to the top.) Unit : 1 (0.1 mm) Default : 0 (0 mm)		Range : -50 to +50 (-5.0mm to +5.0mm) (+ values move the image to the top.) Unit : 1 (0.1 mm) Default : 0 (0 mm)	
3572	Zero print master-making warning				
		With the printer-auto-selection activated, master-making will be made, but the selection can be made to display the warning message [F60] or not when the print quantity is selected as zero (0) in scanner mode.			
		0: No warning displayed. <default> 1: Warning displayed.			
3579	Link Duplex Print Auto-Repeat				
		The selection to keep the duplex printing mode activated or to deactivate the mode after the duplex print job is finished on a linked printer.			
		0: Deactivate 1: Keep activated <default>			

13. Options (Vender) Test Mode

EZ5		EZ2 & EZ3
No.	Data Setting	
3770	Vender Selection	
	(Japan market machine only) Selection between	
	coin vender or card vender.	
	0: Coin vender <default>	
	1: Card vender	

MEMO

CHAPTER 20: WIRING DIAGRAMS

Contents

The wiring diagrams stay the same from those on the EZ/EV Series Technical Manual (Rev.1.1R).

The difference would be that the following two PCBs differ between the EZxx0 Series machines and EZxx1 Series Machines.

1) **Mechanical Control PCB**

The Mechanical Control PCB is upper compatible in which that used on EZxx1 Series can be used on EZxx0 series machines, but that used on EZxx0 Series machines is not compatible to the EZxx1 Series machines.

2) **NeoROSA PCB**

The NeoROSA PCB for EZxx0 Series machines and for EZxx1 Series machines are not compatible to the other Series.

The one for EZxx0 Series can be used on EZxx0 Series only, and the one for EZxx1 Series can be used on EZxx1 Series only.

For the correct updated Part Numbers for the PCBs and Wire Harness, please refer to the new Parts List which lists the parts for both the EZxx0 and EZxx1 Series machines.

MEMO

EZxx1 SERIES

The difference from the previous EZxx0 SERIES
<<TECHNICAL MANUAL>>

REVISION 1.0

Published July 17, 2012

Reproduction and duplication prohibited.

Edited and published by: Overseas Technical Department,
Riso Kagaku Corporation.

The contents of this manual are subject to change
without notice to permit product improvements.
